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**What is "[Embedded - Microcontrollers](#)"?**



"[Embedded - Microcontrollers](#)" refer to small, integrated circuits designed to perform specific tasks within larger systems. These microcontrollers are essentially compact computers on a single chip, containing a processor core, memory, and programmable input/output peripherals. They are called "embedded" because they are embedded within electronic devices to control various functions, rather than serving as standalone computers. Microcontrollers are crucial in modern electronics, providing the intelligence and control needed for a wide range of applications.

**Applications of "[Embedded - Microcontrollers](#)"**

**Details**

Product Status	Discontinued at Digi-Key
Core Processor	XC800
Core Size	8-Bit
Speed	24MHz
Connectivity	I <sup>2</sup> C, SSC, UART/USART
Peripherals	Brown-out Detect/Reset, LED, POR, PWM, WDT
Number of I/O	13
Program Memory Size	4KB (4K x 8)
Program Memory Type	FLASH
EEPROM Size	-
RAM Size	512 x 8
Voltage - Supply (Vcc/Vdd)	2.5V ~ 5.5V
Data Converters	A/D 4x10b
Oscillator Type	Internal
Operating Temperature	-40°C ~ 125°C (TA)
Mounting Type	-
Package / Case	-
Supplier Device Package	-
Purchase URL	<a href="https://www.e-xfl.com/product-detail/infineon-technologies/xc822mt1fraa邢xuma1">https://www.e-xfl.com/product-detail/infineon-technologies/xc822mt1fraa邢xuma1</a>

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# Microcontrollers

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 8-bit</b>				
<b>XC800 Family</b>				
<b>XC878 Series</b>				
SAF-XC878-13FFA 5V AC-Step	SP000756808	XC87813FFA5VACFXUMA1	PG-LQFP-64-1	High performance XC800 core, based on industry standard 8051 architecture, 52-Kbyte flash memory, automotive quality level, 256-byte RAM, 3-Kbyte XRAM, capture/compare unit (CCU6), 16-bit timers/counters, 10-bit ADC, port- and core voltage watchdog circuit with RESET generation, watchdog timer, on-chip debug support (JTAG), 26.7-MHz clock frequency, 5-V power supply, -40°C to 85°C, tape & reel
SAK-XC878-13FFA 5V AC-Step	SP000847062	XC87813FFA5VACKXUMA1	PG-LQFP-64-1	as SAF-XC878-13FFA 5V, -40°C to 125°C, tape & reel
SAF-XC878-16FFI 5V AC-Step	SP000696772	XC87816FFI5VACFXUMA1	PG-LQFP-64-1	as SAF-XC878-16FFI 5V, 64-Kbyte flash memory, industry quality level, tape & reel
SAK-XC878-16FFA 5V AC-Step	SP000847066	XC87816FFA5VACKXUMA1	PG-LQFP-64-1	as SAF-XC878-16FFA 5V, -40°C to 125°C, tape & reel
SAK-XC878CLM-16FFA 5V AC-Step	SP000761974	XC878CLM16FFA5VACKXUMA1	PG-LQFP-64-1	as SAF-XC878-13FFA 5V, 64-Kbyte flash memory, with LIN BSL support, with CAN- and MDU module, -40°C to 125°C, tape & reel
SAX-XC878CLM-16FFA5V AC-Step	SP000608972	XC878CLM16FFA5VACXXUMA1	PG-LQFP-64-1	as SAK-XC878CLM-16FFA 5V, -40°C to 105°C, tape & reel
SAF-XC878CM-16FFA 5V AC-Step	SP000772210	XC878CM16FFA5VACFXUMA1	PG-LQFP-64-1	as SAK-XC878CLM-16FFA 5V, no LIN BSL support, -40°C to 85°C, tape & reel
SAK-XC878CM-16FFA 5V AC-Step	SP000847064	XC878CM16FFA5VACKXUMA1	PG-LQFP-64-1	as SAF-XC878CM-16FFA 5V, -40°C to 125°C, tape & reel
SAX-XC878CM-16FFA 5V AC-Step	SP000409562	XC878CM16FFA5VACXXUMA1	PG-LQFP-64-1	as SAK-XC878CM-16FFA 5V, -40°C to 105°C, tape & reel
SAF-XC878CM-16FFI 3V3 AC-Step	SP000696786	XC878CM16FFI3V3ACFXUMA1	PG-LQFP-64-1	as SAF-XC878CM-16FFA 5V, industry quality level, 3.3-V power supply, tape & reel
SAF-XC878CM-16FFI 5V AC-Step	SP000679860	XC878CM16FFI5VACFXUMA1	PG-LQFP-64-1	as SAF-XC878CM-16FFI 3V3, 5-V power supply, tape & reel
SAF-XC878M-13FFI 3V3 AC-Step	SP000696774	XC878M13FFI3V3ACFXUMA1	PG-LQFP-64-1	as SAF-XC878CM-16FFI 3V3, 52-Kbyte flash memory, with MDU module, no CAN module, tape & reel
SAF-XC878M-16FFI 3V3 AC-Step	SP000696778	XC878M16FFI3V3ACFXUMA1	PG-LQFP-64-1	as SAF-XC878M-13FFI 3V3, 64-Kbyte flash memory, tape & reel
SAF-XC878M-16FFI 5V AC-Step	SP000696780	XC878M16FFI5VACFXUMA1	PG-LQFP-64-1	as SAF-XC878M-16FFI 3V3, 5-V power supply, tape & reel
SAX-XC878LM-13FFA 5V AC-Step	SP000447320	XC878LM13FFA5VACXXUMA1	PG-LQFP-64-1	as SAF-XC878M-13FFI 3V3, automotive quality level, with LIN BSL support and MDU module, 5-V power supply, -40°C to 105°C, tape & reel
SAK-XC878LM-16FFA 5V AC-Step	SP000844190	XC878LM16FFA5VACKXUMA1	PG-LQFP-64-1	as SAX-XC878LM-13FFA 5V, 64-Kbyte flash memory, -40°C to 125°C, tape & reel

SMD = Surface Mounted Device

# Microcontrollers

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 8-bit</b>				
<b>XC800 Family</b>				
<b>XC886CLM Series</b>				
SAA-XC886CLM-8FFA AC-Step	SP000618282	XC886CLM8FFAACAXUMA1	PG-TQFP-48	High performance XC800 core, based on industry standard 8051 architecture, 32-Kbyte flash memory, automotive quality level, 256-byte RAM, 1536-byte XRAM, MultiCAN with 2 nodes, capture/compare unit (CCU6), 16-bit timers/counters, 10-bit ADC, port- and core voltage watchdog circuit with RESET generation, watchdog timer, on-chip debug support (JTAG), with LIN BSL support, with CAN- and MDU module, -40°C to 140°C, tape & reel
SAK-XC886CLM-8FFA 5V AC-Step	SP000606750	XC886CLM8FFA5VACKXUMA1	PG-TQFP-48	as SAA-XC886CLM-8FFA, -40°C to 125°C, 5-V power supply, tape & reel
SAL-XC886CLM-8FFA 5V AC-Step	SP000829526	XC886CLM8FFA5VACLXUMA1	PG-TQFP-48	as SAK-XC886CLM-8FFA, -40°C to 150°C, tape & reel
<b>XC886CM Series</b>				
SAF-XC886CM-6RFA	SP000254732	XC886CM6RFAFZZA1	PG-TQFP-48	High performance XC800 core, based on industry standard 8051 architecture, 24-Kbyte ROM, automotive quality level, 256-byte RAM, 1536-byte XRAM, MultiCAN with 2 nodes, capture/compare unit (CCU6), 16-bit timers/counters, 10-bit ADC, port- and core voltage watchdog circuit with RESET generation, watchdog timer, on-chip debug support (JTAG), with CAN- and MDU module, -40°C to 85°C, tape & reel
SAK-XC886CM-6RFA 5V AA-Step	SP000245804	XC886CM6RFA5VAAKZZA1	PG-TQFP-48	as SAF-XC886CM-6RFA, 5-V power supply, -40°C to 125°C, tape & reel
SAA-XC886CM-8FFA AC-Step	SP000639468	XC886CM8FFA5VACAXUMA1	PG-TQFP-48	High performance XC800 core, based on industry standard 8051 architecture, 32-Kbyte flash memory, automotive quality level, 256-byte RAM, 1536-byte XRAM, MultiCAN with 2 nodes, capture/compare unit (CCU6), 16-bit timers/counters, 10-bit ADC, port- and core voltage watchdog circuit with RESET generation, watchdog timer, on-chip debug support (JTAG), with CAN- and MDU module, -40°C to 140°C, tape & reel
SAK-XC886CM-8FFA 3V3 AC-Step	SP000607082	XC886CM8FFA3V3ACKXUMA1	PG-TQFP-48	as SAA-XC886CM-8FFA, -40°C to 125°C, 3.3-V power supply, tape & reel

SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 16-bit</b>				
<b>C166 Family</b>				
<b>C164CI Series</b>				
SAF-C164CI-LM CA+-Step	SP000103495	C164CILMCAFUXUMA1	PG-MQFP-80-7	ROMless, 4-Kbyte on-chip static RAM, 10-bit- ADC, real time clock, programmable watchdog timer, oscillator watchdog, idle and power down mode, full CAN-controller (V 2.0 B active), 20-MHz clock frequency, -40°C to 85°C, tape & reel
SAK-C164CI-LM CA+-Step	SP000103497	C164CILMCAKXUMA1	PG-MQFP-80-7	as SAF-C164CI-LM, -40°C to 125°C, tape & reel
SAK-C164CI-L25M CA+-Step	SP000103496	C164CIL25MCAKXUMA1	PG-MQFP-80-7	as SAF-C164CI-LM, 25-MHz clock frequency, tape & reel
SAB-C164CI-LM3V CA+-Step	SP000103494	C164CILM3VCABXUMA1	PG-MQFP-80-7	as SAF-C164CI-LM, operating range 3V, 0°C to 70°C, tape & reel
SAF-C164CI-8EM CB-Step	SP000103498	C164CI8EMCBFXQMA1	PG-MQFP-80-7	as SAF-C164CI-LM, 64-Kbyte OTP-memory, 4-Kbyte on-chip static RAM, 10-bit ADC, real time clock, programmable watchdog timer, oscillator watchdog, idle and power down mode, full CAN-controller (V 2.0 B active), drive control unit, 20-MHz clock frequency, -40°C to 85°C, tray
SAF-C164CI-8EM CB-Step	SP000103499	C164CI8EMCBFXUMA1	PG-MQFP-80-7	as SAF-C164CI-8EM, tape & reel
SAF-C164CI-8EM DB-Step	SP000104055	C164CI8EMDBFXQMA1	PG-MQFP-80-7	as SAF-C164CI-8EM, DB-Step, tray
SAF-C164CI-8EM DB-Step	SP000104056	C164CI8EMDBFXUMA1	PG-MQFP-80-7	as SAF-C164CI-8EM, DB-Step, tape & reel
SAK-C164CI-8EM CB-Step	SP000103500	C164CI8EMCBKXQMA1	PG-MQFP-80-7	as SAF-C164CI-8M, -40°C to 125°C, tray
SAK-C164CI-8EM CB-Step	SP000103501	C164CI8EMCBKXUMA1	PG-MQFP-80-7	as SAK-C164CI-8EM, tape & reel
SAK-C164CI-8EM DB-Step	SP000104059	C164CI8EMDBKXQMA1	PG-MQFP-80-7	as SAK-C164CI-8EM, DB-Step, tray
SAK-C164CI-8EM DB-Step	SP000104060	C164CI8EMDBKXUMA1	PG-MQFP-80-7	as SAK-C164CI-8EM, tape & reel
SAF-C164CI-8E25M DB-Step	SP000104053	C164CI8E25MDBFXQMA1	PG-MQFP-80-7	as SAF-C164CI-8EM, 25-MHz clock frequency, tray
SAF-C164CI-8E25M DB-Step	SP000104054	C164CI8E25MDBFXUMA1	PG-MQFP-80-7	as SAF-C164CI-8E25M, tape & reel
SAK-C164CI-8E25M DB-Step	SP000104057	C164CI8E25MDBKXQMA1	PG-MQFP-80-7	as SAF-C164CI-825M, tray
SAK-C164CI-8E25M DB-Step	SP000104058	C164CI8E25MDBKXUMA1	PG-MQFP-80-7	as SAK-C164CI-8E25M, tape & reel
SAF-C164CI-8RM CA-Step	SP000957756	C164CI8RMCAFZZZA1	PG-MQFP-80-7	as SAF-C164CI-8EM, 64-Kbyte ROM, tape & reel

SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 16-bit</b>				
<b>XC2000 Family</b>				
<b>XC2x8x Series (Body)</b>				
SAK-XC2080-96F66L AC-Step	SP000919146	XC208096F66LACKXUMA1	PG-LQFP-144-4	16/32-bit single-chip microcontroller with 32-bit performance XC2200 family High performance CPU with 5-stage pipeline, 768-Kbyte on-chip program memory, 64-Kbyte on-chip program/data SRAM(PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, four capture/compare unit (CCU6), 16 + 8-channel 10-Bit A/D converter, five Full-CAN nodes, six serial interface channels, 66-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2080-96F80L AC-Step	SP000904992	XC208096F80LACKXUMA1	PG-LQFP-144-4	as SAK-XC2080-96F66L, 80-MHz clock frequency, tape & reel
SAK-XC2080H-200F100L AB-Step	SP000905006	XC2080H200F100LABKXUMA1	PG-LQFP-144-4	as SAK-XC2080-96F66L, High Line, 1,600-Kbyte on-chip program memory, 112-Kbyte on-chip program/data SRAM (PSRAM), two FlexRay™ nodes, six Full-CAN nodes, ten serial interface channels, 100-MHz clock frequency, tape & reel
SAK-XC2287-96F66L AC-Step	SP000432418	XC228796F66LACKXUMA1	PG-LQFP-144-4	16/32-bit single-chip microcontroller with 32-bit performance XC2200 family High performance CPU with 5-stage pipeline, 768-Kbyte on-chip program memory, 64-Kbyte on-chip program/data SRAM(PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, four capture/compare unit (CCU6), 16 + 8-channel 10-Bit A/D converter, five Full-CAN nodes, six serial interface channels, 66-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2287-96F80L AC-Step	SP000300037	XC228796F80LACKXUMA1	PG-LQFP-144-4	as SAK-XC2287-96F66L, 80-MHz clock frequency, tape & reel

SMD = Surface Mounted Device

## Microcontrollers

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 16-bit</b>				
<b>XC2000 Family</b>				
<b>XC2x8x Series (Body)</b>				
(cont'd)				
SAK-XC2287M-72F80L AA-Step	SP000455428	XC2287M72F80LAAKXUMA1	PG-LQFP-144-13	as SAK-XC2287-96F66L, Base Line, 576-Kbyte on-chip program memory, 32-Kbyte on-chip program/data SRAM (PSRAM), six Full-CAN nodes, eight serial interface channels, 80-MHz clock frequency, tape & reel
SAK-XC2287M-104F80L AA-Step	SP000436560	XC2287M104F80LAAKXUMA1	PG-LQFP-144-13	as SAK-XC2287M-72F80L, 832-Kbyte on-chip program memory, tape & reel
SAK-XC2288H-200F100L AB-Step	SP000844806	XC2288H200F100LABKXUMA1	PG-LQFP-144-13	16/32-bit single-chip microcontroller with 32-bit performance XC2200 family/ High Line  High performance CPU with 5-stage pipeline, 1,600-Kbyte on-chip program memory, 80-Kbyte on-chip program/data SRAM (PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, four capture/compare unit (CCU6), 16 + 8-channel 10-Bit A/D converter, six Full-CAN nodes, ten serial interface channels, 100-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2289H-200F100L AB-Step	SP000700616	XC2289H200F100LABKXUMA1	PG-LQFP-144-13	as SAK-XC2288H-200F100L, High Line, 1,600-Kbyte on-chip program memory, 112-Kbyte on-chip program/data SRAM (PSRAM), two FlexRay™ nodes, six Full-CAN nodes, tape & reel
SAK-XC2289I-136F128L AB-Step	SP000858172	XC2289I136F128LAAKXUMA1	PG-LQFP-144-16	as SAK-XC2289H-200F100, Premium Line 1,088-Kbyte on-chip program memory, 64-Kbyte on-chip program/data SRAM (PSRAM), 16+ 12-channel 12-Bit A/D converter, 128-MHz clock frequency, -40°C to 125°C, tape & reel

SMD = Surface Mounted Device

# Microcontrollers

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 16-bit</b>				
<b>XC2000 Family</b> <b>XC23xx Series (Safety)</b>				
SAK-XC2310S-8F40R AA-Step	SP000870600	XC2310S8F40RAAKXUMA1	PG-TSSOP-38-8	16/32-bit single-chip microcontroller with 32-bit performance XC2300 family/Compact Line High performance CPU with 5-stage pipeline, 64-Kbyte on-chip program memory, 4-Kbyte on-chip program/data SRAM (PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, one capture/compare unit (CCU6), 8-channel 12-Bit A/D converter, two serial interface channels, 40-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2321D-20F66V AA-Step	SP000846748	XC2321D20F66VAAKXUMA1	PG-VQFN-48-54	16/32-bit single-chip microcontroller with 32-bit performance XC2300 family/Econo Line High performance CPU with 5-stage pipeline, 160-Kbyte on-chip program memory, 4-Kbyte on-chip program/data SRAM (PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, two capture/compare unit (CCU6), 10-channel 12-Bit A/D converter, two Full-CAN nodes, four serial interface channels, 66-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2331D-12F66L AA-Step	SP000914768	XC2331D12F66LAAKFUMA1	PG-LQFP-64-22	as SAK-XC2321D-20F66V, 96-Kbyte on-chip program memory, no Full-CAN node, 19-channel 12-Bit A/D converter, LQFP package, tape & reel
SAK-XC2331D-20F66L AA-Step	SP000870660	XC2331D20F66LAAKXUMA1	PG-LQFP-64-22	as SAK-XC2321D-12F66V, 160-Kbyte on-chip program memory, -40°C to 125°C, tape & reel

SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 16-bit</b>				
<b>XC2000 Family</b>				
<b>XC23xx Series (Safety)</b>				
(cont'd)				
SAK-XC2364A-104F80L AA-Step	SP000526792	XC2364A104F80LAAKXUMA1	PG-LQFP-100-8	16/32-bit single-chip microcontroller with 32-bit performance, XC2300 family High performance CPU with 5-stage pipeline, 832-Kbyte on-chip program memory, 32-Kbyte on-chip program/data SRAM (PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, two capture/compare unit (CCU6), 11 + 5-channel 10-Bit A/D converter, two Full-CAN nodes, four serial interface channels, 80-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2364B-40F80L AA-Step	SP000541956	XC2364B40F80LAAKXUMA1	PG-LQFP-100-8	as SAK-XC2364A-104F80L, 320-Kbyte on-chip program memory, 16-Kbyte on-chip program/data SRAM (PSRAM), tape & reel
SAK-XC2365A-72F80L AA-Step	SP000448774	XC2365A72F80LAAKXUMA1	PG-LQFP-100-8	16/32-bit single-chip microcontroller with 32-bit performance XC2300 family High performance CPU with 5-stage pipeline, 576-Kbyte on-chip program memory, 32-Kbyte on-chip program/data SRAM (PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, two capture/compare unit (CCU6), 11 + 5-channel 10-Bit A/D converter, three Full-CAN nodes, six serial interface channels, 80-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2365A-104F80L AA-Step	SP000448776	XC2365A104F80LAAKXUMA1	PG-LQFP-100-8	as SAK-XC2365A-72F80L, 832-Kbyte on-chip program memory , tape & reel
SAK-XC2365B-40F80L AA-Step	SP000541896	XC2365B40F80LAAKXUMA1	PG-LQFP-100-8	as SAK-XC2365A-104F80L, 320-Kbyte on-chip program memory , 16-Kbyte on-chip program/data SRAM (PSRAM), tape & reel

SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Description
<b>Microcontrollers, 16-bit</b>				
<b>XC2000 Family</b>				
<b>XC27xx Series (Powertrain)</b>				
(cont'd)				
SAK-XC2785X-104F80L AA-Step	SP000439080	XC2785X104F80LAAKXUMA1	PG-LQFP-144-13	16/32-bit single-chip microcontroller with 32-bit performance XC2700 family High performance CPU with 5-stage pipeline, 832-Kbyte on-chip program memory, 32-Kbyte on-chip program/data SRAM (PSRAM), 1024 bytes on-chip special function register area (C166 family compatible), programmable watchdog timer and oscillator watchdog, four capture/compare unit (CCU6), 16 + 8-channel 10-Bit A/D converter, two Full-CAN nodes, six serial interface channels, 80-MHz clock frequency, -40°C to 125°C, tape & reel
SAF-XC2786X-96F66L AC-Step	SP000369364	XC2786X96F66LACKXUMA1	PG-LQFP-144-4	as SAK-XC2785X-104F80L, 768-Kbyte on-chip program memory, 32-Kbyte on-chip program/data SRAM (PSRAM), four serial interface channels, 66-MHz clock frequency, -40°C to 85°C, tape & reel
SAK-XC2787X-200F100L AB-Step	SP000804404	XC2787X200F100LABKXUMA1	PG-LQFP-144-13	as SAK-XC2785X-104F80L, 1,600-Kbyte on-chip program memory, 138-Kbyte on-chip program/data SRAM (PSRAM), 100-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2788X-136F128L AA-Step	SP000886706	XC2788X136F128LAAKXUMA1	PG-LQFP-144-13	as SAK-XC2785X-104F80L, 1,088-Kbyte on-chip program memory, 64-Kbyte on-chip program/data SRAM (PSRAM), 128-MHz clock frequency, -40°C to 125°C, tape & reel
SAK-XC2797X-200F100L AB-Step	SP000804406	XC2797X200F100LABKXUMA1	PG-LQFP-176-12	as SAK-XC2787-200F100L, 16 + 14-channel 10-Bit A/D converter, tape & reel

SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Data			
				$V_{DS}$	$R_{DS\ (on)\ max}$	$V_{GS\ (th)}$	$I_D$
				V	mΩ	V	A

**N-Channel MOSFETs****30V**

BSB012N03LX3 G	SP000597846	BSB012N03LX3GXUMA1	CanPAK™ M-size	30	1.2	1.0 ... 2.2	180
BSB017N03LX3 G	SP000604468	BSB017N03LX3GXUMA1	CanPAK™ M-size	30	1.7	1.0 ... 2.2	147
BSC011N03LS	SP000799082	BSC011N03LSATMA1	SuperSO8	30	1.1	1.0 ... 2.2	100
BSC011N03LSI	SP000884574	BSC011N03LSIATMA1	SuperSO8	30	1.1	1.2 ... 2.0	100
BSC014N03LS G	SP000394677	BSC014N03LSGATMA1	SuperSO8	30	1.4	1.2 ... 2.0	100
■ BSC016N03LS G	SP000237663	BSC016N03LSGATMA1	SuperSO8	30	1.6	1.0 ... 2.2	100
BSC0901NS	SP000800248	BSC0901NSATMA1	SuperSO8	30	1.9	1.0 ... 2.2	100
BSC0901NSI	SP000819818	BSC0901NSIATMA1	SuperSO8	30	2.0	1.0 ... 2.2	100
■ BSC020N03LS G	SP000237662	BSC020N03LSGATMA1	SuperSO8	30	2.0	1.0 ... 2.2	100
▼ BSC020N03LS G	SP000959514	BSC020N03LSGATMA2	SuperSO8	30	2.0	1.0 ... 2.2	100
BSC025N03LS G	SP000269781	BSC025N03LSGATMA1	SuperSO8	30	2.5	1.0 ... 2.2	100
BSC0902NS	SP000800246	BSC0902NSATMA1	SuperSO8	30	2.6	1.0 ... 2.2	100
BSC0902NSI	SP000854380	BSC0902NSIATMA1	SuperSO8	30	2.8	1.2 ... 2.0	100
BSC030N03LS G	SP000237661	BSC030N03LSGATMA1	SuperSO8	30	3.0	1.0 ... 2.2	100
BSC034N03LS G	SP000475948	BSC034N03LSGATMA1	SuperSO8	30	3.4	1.0 ... 2.2	100
BSC0904NSI	SP000854384	BSC0904NSIATMA1	SuperSO8	30	3.7	1.0 ... 2.2	78
BSC042N03LS G	SP000302864	BSC042N03LSGATMA1	SuperSO8	30	4.2	1.0 ... 2.2	93
BSC0906NS	SP000893360	BSC0906NSATMA1	SuperSO8	30	4.5	1.0 ... 2.2	63
BSC050N03LS G	SP000269785	BSC050N03LSGATMA1	SuperSO8	30	5.0	1.0 ... 2.2	79
BSC052N03LS	SP000807602	BSC052N03LSATMA1	SuperSO8	30	5.2	1.0 ... 2.2	57
BSC057N03LS G	SP000275113	BSC057N03LSGATMA1	SuperSO8	30	5.7	1.0 ... 2.2	71
BSC072N03LD G	SP000359607	BSC072N03LDGATMA1	SuperSO8 dual	30	7.2	1.0 ... 2.2	20
BSC079N03LSC G	SP000527424	BSC079N03LSCGATMA1	SuperSO8	30	7.9	1.0 ... 2.2	50
BSC0908NS	SP000847024	BSC0908NSATMA1	SuperSO8	30	8.0	1.0 ... 2.2	49
BSC080N03LS G	SP000275114	BSC080N03LSGATMA1	SuperSO8	30	8.0	1.0 ... 2.2	52
BSC090N03LS G	SP000275115	BSC090N03LSGATMA1	SuperSO8	30	9.0	1.0 ... 2.2	47
BSC0909NS	SP000832576	BSC0909NSATMA1	SuperSO8	30	9.2	1.0 ... 2.2	44
BSC120N03LS G	SP000302848	BSC120N03LSGATMA1	SuperSO8	30	12	1.0 ... 2.2	39
BSC150N03LD G	SP000359362	BSC150N03LDGATMA1	SuperSO8 dual	30	15	1.0 ... 2.2	20
BSC0921NDI	SP000934748	BSC0921NDIATMA1	PowerStage 5x6	30	5.0/1.6	1.2 ... 2.0	40
BSC0923NDI	SP000934758	BSC0923NDIATMA1	PowerStage 5x6	30	5.0/2.8	1.2 ... 2.0	40
BSC0924NDI	SP000934750	BSC0924NDIATMA1	PowerStage 5x6	30	5.0/3.7	1.2 ... 2.0	40
BSC0925ND	SP000934752	BSC0925NDATMA1	PowerStage 5x6	30	5.0	1.2 ... 2.0	40
BSD316SN H6327	SP000917668	BSD316SNH6327XTSA1	SOT363	30	160	1.2 ... 2.0	1.4
BSF024N03LT3 G	SP000616988	BSF024N03LT3GXUMA1	CanPAK™ S-size	30	2.4	1.0 ... 2.2	106
■ BSF045N03LQ3 G	SP000597842	BSF045N03LQ3GXUMA1	CanPAK™ S-size	30	4.5	1.0 ... 2.2	63
BSF050N03LQ3 G	SP000604522	BSF050N03LQ3GXUMA1	CanPAK™ S-size	30	5.0	1.2 ... 2.2	60
▼ BSN012N03LS	SP001074740	BSN012N03LSXUSA1	Blade 3x3	30	1.2	1.2 ... 2.0	50
▼ BSN012N03LSI	SP001074742	BSN012N03LSIXUSA1	Blade 3x3	30	1.2	1.2 ... 2.0	50
▼ BSN048N03LS	SP001074746	BSN048N03LSXUSA1	Blade 3x3	30	4.8	1.2 ... 2.0	50
BSR302N	SP000257785	BSR302NL6327HTSA1	SC59	30	23	1.2 ... 2.0	3.7
BSS306N	SP000928940	BSS306NH6327XTSA1	SOT23	30	57	1.2 ... 2.0	2.3
BSS316N	SP000928948	BSS316NH6327XTSA1	SOT23	30	160	1.2 ... 2.0	1.4
BSZ019N03LS	SP000792362	BSZ019N03LSATMA1	S308	30	1.9	1.0 ... 2.2	40
BSZ0901NS	SP000854570	BSZ0901NSATMA1	S308 (fused leads)	30	2.0	1.0 ... 2.2	40
BSZ0901NSI	SP000853566	BSZ0901NSIATMA1	S308 (fused leads)	30	2.1	1.0 ... 2.2	40
BSZ0902NS	SP000854386	BSZ0902NSATMA1	S308 (fused leads)	30	2.6	1.0 ... 2.2	40
BSZ0902NSI	SP000854388	BSZ0902NSIATMA1	S308 (fused leads)	30	2.8	1.0 ... 2.2	40
■ BSZ035N03LS G	SP000278809	BSZ035N03LSGATMA1	S308	30	3.5	1.0 ... 2.2	40

SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Description
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**Power Management ICs****1.5 - 3.3V Ultra Low Quiescent Current Linear Voltage Regulators for Industrial and Consumer Applications**

▼ IFX1763XEJ V33	SP000938790	IFX1763XEJV33XUMA1	PG-DSO-8 EP	3.3V, $I_{out} = 500\text{mA}$ , short circuit protected, Enable, overtemperature protected, tape & reel
▼ IFX54441EJ V33	SP000953844	IFX54441EJV33XUMA1	PG-DSO-8 EP	3.3V, $I_{out} = 300\text{mA}$ , short circuit protected, Enable, overtemperature protected, tape & reel

**5V Ultra Low Quiescent Current Linear Voltage Regulators for Industrial and Consumer Applications**

▼ IFX1763XEJ V50	SP000938802	IFX1763XEJV50XUMA1	PG-DSO-8 EP	5V, $I_{out} = 500\text{mA}$ , short circuit protected, Enable, overtemperature protected, tape & reel
IFX25401TB V50	SP000623298	IFX25401TBV50ATMA1	PG-T0263-5	5V, $I_{out} = 400\text{mA}$ , short circuit protected, overtemperature protected, tape & reel
IFX25401TE V50	SP000623308	IFX25401TEV50ATMA1	PG-T0252-3	
IFX4949SJ	SP000663314	IFX4949SJXUMA1	PG-DSO-8	5V, $I_{out} = 100\text{mA}$ , short circuit protected, overtemperature protected, 2% accuracy, tape & reel
▼ IFX54441EJ V50	SP000953834	IFX54441EJV50XUMA1	PG-DSO-8 EP	5V, $I_{out} = 300\text{mA}$ , short circuit protected, Enable, overtemperature protected, tape & reel

**Adjustable Ultra Low Quiescent Current Linear Voltage Regulators for Industrial and Consumer Applications**

▼ IFX1763XEJV	SP000938788	IFX1763XEJVXUMA1	PG-DSO-8 EP	adj. voltage, $I_{out} = 500\text{mA}$ , short circuit protected, Enable, overtemperature protected, tape & reel
IFX25401TBV	SP000611478	IFX25401TBVATMA1	PG-T0263-5	adj. voltage, $I_{out} = 400\text{mA}$ , short circuit protected, overtemperature protected, tape & reel
IFX25401TEV	SP000614698	IFX25401TEVATMA1	PG-T0252-3	
IFX27001TFV	SP000624090	IFX27001TFVATMA1	PG-T0252-3	adj. voltage, $I_{out} = 1\text{A}$ , short circuit protected, overtemperature protected, tape & reel
▼ IFX54441EJV	SP000953854	IFX54441EJVXUMA1	PG-DSO-8 EP	adj. voltage, $I_{out} = 300\text{mA}$ , short circuit protected, Enable, overtemperature protected, tape & reel

**Industrial Constant Current Relay Driver**

IFX52001EJ	SP000911866	IFX52001EJXUMA1	PG-DSO-8 EP	Coil/relay driver, reduces relay hold current to min. 40mA, overtemperature protected, tape & reel
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**Voltage Tracker for Industrial and Consumer Applications**

IFX21401MB	SP000614692	IFX21401MBHTSA1	PG-SCT595-5	adj. voltage, $I_{out} = 50\text{mA}$ , overtemperature protected, tape & reel
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SMD = Surface Mounted Device

Type	Ordering Code	Orderable Part Number	Package	Description
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**Specific Automotive ICs****Application Specific Standard Products for Restraint Systems**

TLE6710Q	SP000013708	TLE6710QNUMA1	P-MQFP-64-1	Power supply communication four squib driver airbag system ICs, tape & reel
TLE6712G	SP000013710	TLE6712GNTMA1	P-DSO-24-10	Two squib airbag firing ICs, tape & reel
TLE6714G	SP000013709	TLE6714GNTMA1	P-DSO-28-1	Quad squib airbag firing ICs, tape & reel
TLE7729T	SP000312977	TLE7729TXUMA1	PG-TSSOP-28	Quad channel airbag satelite receiver ICs (SatRIC™), tape & reel

**Application Specific Standard Products for Vehicle Stability - Braking (ABS/ESP)**

■ TLE6212	SP000451438	TLE6212XUMA1	PG-LQFP-64-1	System-IC for ABS/Traction Control/Electronic Stability Control, tape & reel
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**Power Interface Products for Motorcycle and Small Engines**

TLE8080EM	SP000823824	TLE8080EMXUMA1	PG-SSOP-24	Engine management IC for small engines, 5V/250mA, K-line transceiver (ISO 9141), SPI, 4 low side driver with overtemperature and overcurrent protection, tape & reel
TLE8080-2EM	SP001052526	TLE80802EMXUMA1	PG-SSOP-24	Engine management IC for small engines, 5V/250mA, K-line transceiver (ISO 9141), SPI, 4 low side driver with overtemperature and overcurrent protection, tape & reel
TLE8088EM	SP000685716	TLE8088EMXUMA1	PG-SSOP-24	Engine management IC for small engines, 5V/150mA, K-line transceiver (ISO 9141), SPI, 1 low side driver with overtemperature and overcurrent protection, tape & reel

SMD = Surface Mounted Device



# RF & Protection Devices

Type	Ordering Code	Orderable Part Number	Package	Maximum Ratings		Characteristics ( $T_A = 25^\circ\text{C}$ )		
				$V_R$	$I_F$	$C_T$	$V_R$	$C_{T1}/C_{T2}$
				V	mA	pF	V	

## RF Varactor Diodes

### UHF and VHF Tuner

(cont'd)

BB639 matched	3k*	SP000010401	BB639E7904HTSA1	SOD323	30	20	36...42	1	13.5
BB639C matched	3k*	SP000010396	BB639CE7904HTSA1	SOD323	30	20	36...42	1	11.1
BB639C unmatched	3k*	SP000010398	BB639CE7908HTSA1	SOD323	30	20	36...42	1	11.1
BB640 matched	3k*	SP000010406	BB640E6327HTSA1	SOD323	30	20	62...76	1	19.5
BB644 matched	3k*	SP000010411	BB644E7904HTSA1	SOD323	30	20	39... 44.5	1	11.8
BB659 matched	3k*	SP000745102	BB659H7902XTSA1	SCD 80	30	20	36...40	1	14.7
BB659C matched	3k*	SP000734324	BB659CH7902XTSA1	SCD80	30	20	36...40	1	11.1
BB659C matched	8k*	SP000745104	BB659CH7912XTSA1	SCD80	30	20	36...42	1	11.1
BB659C matched	10k*	SP000734342	BB659CH7903XTMA1	SCD80	30	20	36...42	1	11.1
BB659C-02V matched	3k*	SP000745108	BB659C02VH7902XTSA1	SC79	30	20	36.5... 42	1	9.5 ... 11.1
BB659C-02V unmatched	3k*	SP000745110	BB659C02VH7908XTSA1	SC79	30	20	36.5... 42	1	9.5 ... 11.1
BB659C-02V matched	8k*	SP000745112	BB659C02VH7912XTSA1	SC79	30	20	36.5... 42	1	9.5 ... 11.1
BB664 matched	3k*	SP000745114	BB664H7902XTSA1	SCD80	30	20	39... 44.5	1	11.8
BB664-02V matched	3k*	SP000745118	BB66402VH7902XTSA1	SC79	30	20	39... 44.5	1	11.8
BB669 matched	3k*	SP000010419	BB669E7904HTSA1	SOD323	30	20	51... 61.5	1	15.5
BB689 matched	3k*	SP000734326	BB689H7902XTSA1	SCD80	30	20	51... 61.5	1	15.5
BB689 unmatched	3k*	SP000745122	BB689H7908XTSA1	SCD80	30	20	51... 61.5	1	15.5
BB689 matched	8k*	SP000842828	BB689H7912XTSA1	SCD80	30	20	51... 61.5	1	15.5
BB689-02V matched	3k*	SP000745124	BB68902VH7902XTSA1	SC79	30	20	51... 61.5	1	15.5
BB689-02V unmatched	3k*	SP000745126	BB68902VH7908XTSA1	SC79	30	20	51... 61.5	1	15.5

\* order unit

SMD = Surface Mounted Device

# General Purpose Diodes & Transistors

Type	Ordering Code	Orderable Part Number	Package	Maximum Ratings				Resistance Value	
				$V_{CEO}$	$V_{I(on)max}$	$I_c$	$P_{tot}$	$R_1$	$R_2$
				V	V	mA	mW	kΩ	kΩ

## Digital Transistors

### Single $I_c \leq 100\text{mA}$

BCR108	3k*	SP000010736	BCR108E6327HTSA1	SOT23	50	10	100	200	2.2	47
BCR108	10k*	SP000010737	BCR108E6433HTMA1	SOT23	50	10	100	200	2.2	47
BCR108W	3k*	SP000750780	BCR108WH6327XTSA1	SOT323	50	10	100	250	2.2	47
BCR108W	10k*	SP000757882	BCR108WH6433XTMA1	SOT323	50	10	100	250	2.2	47
BCR112	3k*	SP000010747	BCR112E6327HTSA1	SOT23	50	15	100	200	4.7	4.7
BCR112W	3k*	SP000750790	BCR112WH6327XTSA1	SOT323	50	15	100	250	4.7	4.7
BCR116	3k*	SP000010749	BCR116E6327HTSA1	SOT23	50	15	100	200	4.7	47
BCR116	10k*	SP000010751	BCR116E6433HTMA1	SOT23	50	15	100	200	4.7	47
BCR116W	3k*	SP000754072	BCR116WH6327XTSA1	SOT323	50	15	100	250	4.7	47
BCR119	3k*	SP000010752	BCR119E6327HTSA1	SOT23	50	15	100	200	4.7	—
BCR119W	3k*	SP000755044	BCR119WH6327XTSA1	SOT323	50	15	100	250	4.7	—
BCR129	3k*	SP000012520	BCR129E6327HTSA1	SOT23	50	20	100	200	10	—
BCR129W	3k*	SP000755048	BCR129WH6327XTSA1	SOT323	50	20	100	250	10	—
BCR133	3k*	SP000010757	BCR133E6327HTSA1	SOT23	50	20	100	200	10	10
BCR133	10k*	SP000010759	BCR133E6433HTMA1	SOT23	50	20	100	200	10	10
BCR133W	3k*	SP000756246	BCR133WH6327XTSA1	SOT323	50	20	100	250	10	10
BCR135	3k*	SP000010765	BCR135E6327HTSA1	SOT23	50	20	100	200	10	47
BCR135	10k*	SP000010767	BCR135E6433HTMA1	SOT23	50	20	100	200	10	47
BCR135W	3k*	SP000756252	BCR135WH6327XTSA1	SOT323	50	20	100	250	10	47
BCR141	3k*	SP000010769	BCR141E6327HTSA1	SOT23	50	30	100	200	22	22
BCR141	10k*	SP000010771	BCR141E6433HTMA1	SOT23	50	30	100	200	22	22
BCR141W	3k*	SP000756258	BCR141WH6327XTSA1	SOT323	50	30	100	250	22	22
BCR142	3k*	SP000010775	BCR142E6327HTSA1	SOT23	50	30	100	200	22	47
BCR142W	3k*	SP000756260	BCR142WH6327XTSA1	SOT323	50	30	100	250	22	47
BCR146	3k*	SP000010777	BCR146E6327HTSA1	SOT23	50	50	70	200	47	22
BCR148	3k*	SP000010780	BCR148E6327HTSA1	SOT23	50	50	70	200	47	47
BCR148	10k*	SP000426390	BCR148E6433HTMA1	SOT23	50	50	70	200	47	47
BCR148W	3k*	SP000756268	BCR148WH6327XTSA1	SOT323	50	50	70	250	47	47
BCR158	3k*	SP000010784	BCR158E6327HTSA1	SOT23	50	10	100	200	2.2	47
BCR158W	3k*	SP000750762	BCR158WH6327XTSA1	SOT323	50	10	100	250	2.2	47
BCR162	3k*	SP000010785	BCR162E6327HTSA1	SOT23	50	15	100	200	4.7	4.7
BCR166	3k*	SP000010788	BCR166E6327HTSA1	SOT23	50	15	100	200	4.7	47
BCR166	10k*	SP000010791	BCR166E6433HTMA1	SOT23	50	15	100	200	4.7	47
BCR166W	3k*	SP000750764	BCR166WH6327XTSA1	SOT323	50	15	100	250	4.7	47
BCR169	3k*	SP000010793	BCR169E6327HTSA1	SOT23	50	15	100	200	4.7	—
BCR169W	3k*	SP000756844	BCR169WH6327XTSA1	SOT323	50	15	100	250	4.7	—
BCR183	3k*	SP000010794	BCR183E6327HTSA1	SOT23	50	20	100	200	10	10
BCR183	10k*	SP000010796	BCR183E6433HTMA1	SOT23	50	20	100	200	10	10
BCR183W	3k*	SP000757002	BCR183WH6327XTSA1	SOT323	50	20	100	250	10	10
BCR185	3k*	SP000010806	BCR185E6327HTSA1	SOT23	50	20	100	200	10	47
BCR185	10k*	SP000010807	BCR185E6433HTMA1	SOT23	50	20	100	200	10	47
BCR185W	3k*	SP000757894	BCR185WH6327XTSA1	SOT323	50	20	100	250	10	47
BCR191	3k*	SP000010810	BCR191E6327HTSA1	SOT23	50	30	100	200	22	22
BCR191W	3k*	SP000757896	BCR191WH6327XTSA1	SOT323	50	30	100	250	22	22

\* order unit

SMD = Surface Mounted Device

# General Purpose Diodes & Transistors

Type	Ordering Code	Orderable Part Number	Package	Maximum Ratings				Resistance Value	
				$V_{CEO}$	$V_{I(on) max}$	$I_c$	$P_{tot}$	$R_1$	$R_2$
				V	V	mA	mW	kΩ	kΩ

## Digital Transistors

### Single $I_c \leq 100\text{mA}$

(cont'd)

BCR192	3k*	SP000010812	BCR192E6327HTSA1	SOT23	50	30	100	200	22	47
BCR192W	3k*	SP000757898	BCR192WH6327XTSA1	SOT323	50	30	100	250	22	47
BCR196	3k*	SP000014762	BCR196E6327HTSA1	SOT23	50	50	70	250	47	22
BCR196W	3k*	SP000757902	BCR196WH6327XTSA1	SOT323	50	50	70	250	47	22
BCR198	3k*	SP000010817	BCR198E6327HTSA1	SOT23	50	50	70	200	47	47
BCR198	10k*	SP000010820	BCR198E6433HTMA1	SOT23	50	50	70	200	47	47
BCR198W	3k*	SP000757912	BCR198WH6327XTSA1	SOT323	50	50	70	250	47	47

### Dual $I_c \leq 100\text{mA}$

BCR108S	3k*	SP000750774	BCR108SH6327XTSA1	SOT363	50	10	100	250	2.2	47
BCR116S	3k*	SP000752050	BCR116SH6327XTSA1	SOT363	50	15	100	250	4.7	47
BCR119S	3k*	SP000754074	BCR119SH6327XTSA1	SOT363	50	15	100	250	4.7	—
BCR119S	10k*	SP000755042	BCR119SH6433XTMA1	SOT363	50	15	100	250	4.7	—
BCR129S	3k*	SP000755046	BCR129SH6327XTSA1	SOT363	50	20	100	250	10	—
BCR133S	3k*	SP000755050	BCR133SH6327XTSA1	SOT363	50	20	100	250	10	10
BCR133S	10k*	SP000755082	BCR133SH6433XTMA1	SOT363	50	20	100	250	10	10
BCR135S	3k*	SP000756248	BCR135SH6327XTSA1	SOT363	50	20	100	250	10	47
BCR141S	3k*	SP000756256	BCR141SH6327XTSA1	SOT363	50	30	100	250	22	22
BCR148S	3k*	SP000756262	BCR148SH6327XTSA1	SOT363	50	50	70	250	47	47
BCR148S	10k*	SP000756264	BCR148SH6433XTMA1	SOT363	50	50	70	250	47	47
BCR169S	3k*	SP000756842	BCR169SH6327XTSA1	SOT363	50	15	100	250	4.7	—
BCR183S	3k*	SP000756882	BCR183SH6327XTSA1	SOT363	50	20	100	250	10	10
▼ BCR183S	10k*	SP000756886	BCR183SH6433XTMA1	SOT363	50	20	100	250	10	10
BCR183U	3k*	SP000012552	BCR183UE6327HTSA1	SC74	50	20	100	250	10	10
BCR185S	3k*	SP000757888	BCR185SH6327XTSA1	SOT363	50	20	100	250	10	47
BCR198S	3k*	SP000757904	BCR198SH6327XTSA1	SOT363	50	50	70	250	47	47
BCR08PN	3k*	SP000750766	BCR08PNH6327XTSA1	SOT363	50	50	100	250	2.2	47
BCR08PN	3k*	SP000750772	BCR08PNH6727XTSA1	SOT363	50	50	100	250	2.2	47
BCR08PN	10k*	SP000750770	BCR08PNH6433XTMA1	SOT363	50	50	100	250	2.2	47
BCR10PN	3k*	SP000750782	BCR10PNH6327XTSA1	SOT363	50	25	100	250	10	10
BCR10PN	3k*	SP000750786	BCR10PNH6727XTSA1	SOT363	50	25	100	250	10	10
BCR10PN	10k*	SP000750788	BCR10PNH6730XTMA1	SOT363	50	25	100	250	10	10
BCR22PN	3k*	SP000757916	BCR22PNH6327XTSA1	SOT363	50	30	100	250	22	22
BCR22PN	10k*	SP000757920	BCR22PNH6433XTMA1	SOT363	50	30	100	250	22	22
BCR35PN	3k*	SP000757922	BCR35PNH6327XTSA1	SOT363	50	20	100	250	10	47
BCR35PN	10k*	SP000757928	BCR35PNH6433XTMA1	SOT363	50	20	100	250	10	47
BCR48PN	3k*	SP000757930	BCR48PNH6327XTSA1	SOT363	50	50/10	100	250	47/2.2	47/47
BCR48PN	10k*	SP000757932	BCR48PNH6433XTMA1	SOT363	50	50/10	100	250	47/2.2	47/47

\* order unit

SMD = Surface Mounted Device

# General Purpose Diodes & Transistors

Type	Ordering Code	Orderable Part Number	Package	Maximum Ratings		Characteristics ( $T_A = 25^\circ\text{C}$ )		
				$V_{CEO}$	$I_{CM}$	$h_{FE}$	at	$I_c$
				V	mA		mA	V

## General Purpose Transistors

### Single $I_c \leq 100\text{mA}$

BC847A	3k*	SP000010571	BC847AE6327HTSA1	SOT23	45	200	110 ... 220	2	5
BC847B	3k*	SP000010559	BC847BE6327HTSA1	SOT23	45	200	200 ... 450	2	5
BC847B	10k*	SP000010576	BC847BE6433HTMA1	SOT23	45	200	200 ... 450	2	5
BC847BL3	15k*	SP000013553	BC847BL3E6327XTMA1	TSLP-3-1	45	200	200 ... 450	2	5
BC847BW	3k*	SP000746930	BC847BWH6327XTSA1	SOT323	45	200	200 ... 450	2	5
BC847BW	10k*	SP000746932	BC847BWH6433XTMA1	SOT323	45	200	200 ... 450	2	5
BC847C	3k*	SP000010565	BC847CE6327HTSA1	SOT23	45	200	420 ... 800	2	5
BC847C	10k*	SP000010590	BC847CE6433HTMA1	SOT23	45	200	420 ... 800	2	5
BC847CW	3k*	SP000746934	BC847CWH6327XTSA1	SOT323	45	200	420 ... 800	2	5
BC847CW	3k*	SP000747286	BC847CWH6778XTSA1	SOT323	45	200	420 ... 800	2	5
BC847CW	10k*	SP000747284	BC847CWH6433XTMA1	SOT323	45	200	420 ... 800	2	5
BC848A	3k*	SP000010568	BC848AE6327HTSA1	SOT23	30	200	110 ... 220	2	5
BC848B	3k*	SP000010561	BC848BE6327HTSA1	SOT23	30	200	200 ... 450	2	5
BC848B	10k*	SP000010581	BC848BE6433HTMA1	SOT23	30	200	200 ... 450	2	5
BC848BL3	15k*	SP000013554	BC848BL3E6327XTMA1	TSLP-3-1	30	200	200 ... 450	2	5
BC848BW	3k*	SP000747410	BC848BWH6327XTSA1	SOT323	30	200	200 ... 450	2	5
BC848C	3k*	SP000010552	BC848CE6327HTSA1	SOT23	30	200	420 ... 800	2	5
BC848C	10k*	SP000010582	BC848CE6433HTMA1	SOT23	30	200	420 ... 800	2	5
BC848CW	3k*	SP000747412	BC848CWH6327XTSA1	SOT323	30	200	420 ... 800	2	5
BC849B	3k*	SP000010567	BC849BE6327HTSA1	SOT23	30	200	200 ... 450	2	5
BC849C	3k*	SP000010564	BC849CE6327HTSA1	SOT23	30	200	420 ... 800	2	5
BC849CW	3k*	SP000747414	BC849CWH6327XTSA1	SOT323	30	200	420 ... 800	2	5
BC850B	3k*	SP000010572	BC850BE6327HTSA1	SOT23	45	200	200 ... 450	2	5
BC850BW	3k*	SP000747416	BC850BWH6327XTSA1	SOT323	45	200	200 ... 450	2	5
BC850C	3k*	SP000010563	BC850CE6327HTSA1	SOT23	45	200	420 ... 800	2	5
BC850CW	3k*	SP000747418	BC850CWH6327XTSA1	SOT323	45	200	420 ... 800	2	5
BC857A	3k*	SP000010639	BC857AE6327HTSA1	SOT23	45	200	125 ... 250	2	5
BC857B	3k*	SP000010633	BC857BE6327HTSA1	SOT23	45	200	220 ... 475	2	5
BC857B	10k*	SP000010648	BC857BE6433HTMA1	SOT23	45	200	220 ... 475	2	5
BC857BL3	3k*	SP000013556	BC857BL3E6327XTMA1	TSLP-3-1	45	200	220 ... 475	2	5
BC857BW	3k*	SP000747448	BC857BWH6327XTSA1	SOT323	45	200	220 ... 475	2	5
BC857BW	3k*	SP000747450	BC857BWH6778XTSA1	SOT323	45	200	220 ... 475	2	5
BC857C	3k*	SP000010640	BC857CE6327HTSA1	SOT23	45	200	420 ... 800	2	5
BC857C	10k*	SP000010660	BC857CE6433HTMA1	SOT23	45	200	420 ... 800	2	5
BC857CW	3k	SP000747452	BC857CWH6327XTSA1	SOT323	45	200	420 ... 800	2	5
BC857CW	10k*	SP000747454	BC857CWH6433XTMA1	SOT323	45	200	420 ... 800	2	5
BC858A	3k*	SP000010636	BC858AE6327HTSA1	SOT23	30	200	125 ... 250	2	5
BC858B	3k	SP000010634	BC858BE6327HTSA1	SOT23	30	200	220 ... 475	2	5
BC858B	10k*	SP000010652	BC858BE6433HTMA1	SOT23	30	200	220 ... 475	2	5
BC858BW	3k	SP000747582	BC858BWH6327XTSA1	SOT323	30	200	220 ... 475	2	5
BC858C	3k	SP000010624	BC858CE6327HTSA1	SOT23	30	200	420 ... 800	2	5
BC858C	10k*	SP000010654	BC858CE6433HTMA1	SOT23	30	200	420 ... 800	2	5
BC858CW	3k	SP000747584	BC858CWH6327XTSA1	SOT323	30	200	420 ... 800	2	5
BC859C	3k	SP000010637	BC859CE6327HTSA1	SOT23	30	200	420 ... 800	2	5

\* order unit

SMD = Surface Mounted Device

# General Purpose Diodes & Transistors

Type	Ordering Code	Orderable Part Number	Package	Maximum Ratings		Characteristics ( $T_A = 25^\circ\text{C}$ )					
				$V_R$	$I_F$	$V_F$	at	$I_F$			
				V	mA	V		mA			
<b>General Purpose Diodes</b>											
<b><math>I_F(\text{max}) \leq 250\text{mA}</math></b>											
BAL74	3k*	SP000014992	BAL74E6327HTSA1	SOT23	50	250	$\leq 1.0$	100			
BAL99	3k*	SP000010159	BAL99E6327HTSA1	SOT23	70	250	$\leq 1.25$	150			
BAL99	10k*	SP000010161	BAL99E6433HTMA1	SOT23	70	250	$\leq 1.25$	150			
BAR74	3k*	SP000010202	BAR74E6327HTSA1	SOT23	50	250	$\leq 1.0$	100			
BAS16	3k*	SP000010203	BAS16E6327HTSA1	SOT23	75	250	$\leq 1.25$	150			
BAS16	10k*	SP000010201	BAS16E6433HTMA1	SOT23	75	250	$\leq 1.25$	150			
BAS16-02L	15k*	SP000013548	BAS1602LE6327XTMA1	TSLP-2-1	75	250	$\leq 1.25$	150			
BAS16-02V	3k*	SP000752008	BAS1602VH6327XTSA1	SC79	75	250	$\leq 1.25$	150			
BAS16S (Triple)	3k*	SP000753162	BAS16SH6327XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAS16S (Triple)	3k*	SP000753164	BAS16SH6727XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAS16U (Triple)	3k*	SP000012608	BAS16UE6327HTSA1	SC74	80	200	$\leq 1.25$	150			
BAS16W	3k*	SP000753166	BAS16WH6327XTSA1	SOT323	75	250	$\leq 1.25$	150			
BAS16W	10k*	SP000753168	BAS16WH6433XTMA1	SOT323	75	250	$\leq 1.25$	150			
BAS16-02W	3k*	SP000752010	BAS1602WH6327XTSA1	SCD80	75	200	$\leq 1.25$	150			
BAS16-03W	3k*	SP000010213	BAS1603WE6327HTSA1	SOD323	75	250	$\leq 1.25$	150			
BAS21	3k*	SP000010217	BAS21E6327HTSA1	SOT23	200	250	$\leq 1.25$	200			
BAS21	10k*	SP000010219	BAS21E6433HTMA1	SOT23	200	250	$\leq 1.25$	200			
BAS21-03W	3k*	SP000012522	BAS2103WE6327HTSA1	SOD323	200	250	$\leq 1.25$	200			
BAS21-03W	10k*	SP000082470	BAS2103WE6433HTMA1	SOD323	200	250	$\leq 1.25$	200			
BAS21U (Triple)	3k*	SP000012610	BAS21UE6327HTSA1	SC74	200	250	$\leq 1.25$	200			
BAS21U (Triple)	10k*	SP000471142	BAS21UE6433HTMA1	SC74	200	250	$\leq 1.25$	200			
BAS28 (Dual)	3k*	SP000010225	BAS28E6327HTSA1	SOT143	80	200	$\leq 1.25$	150			
BAS28 (Dual)	10k*	SP000010228	BAS28E6433HTMA1	SOT143	80	200	$\leq 1.25$	150			
BAS28W (Dual)	3k*	SP000753170	BAS28WH6327XTSA1	SOT343	80	200	$\leq 1.25$	150			
BAV70 (Dual)	3k*	SP000014923	BAV70E6327HTSA1	SOT23	80	200	$\leq 1.25$	150			
BAV70 (Dual)	10k*	SP000014924	BAV70E6433HTMA1	SOT23	80	200	$\leq 1.25$	150			
BAV70S (Quad)	3k*	SP000753172	BAV70SH6327HTSA1	SOT363	80	200	$\leq 1.25$	150			
BAV70S (Quad)	3k*	SP000753176	BAV70SH6727XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAV70S (Quad)	3k*	SP000753178	BAV70SH6827XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAV70U (Quad)	3k*	SP000012931	BAV70UE6327HTSA1	SC74	80	200	$\leq 1.25$	150			
BAV70W (Dual)	3k*	SP000754042	BAV70WH6327XTSA1	SOT323	80	200	$\leq 1.25$	150			
▼ BAV70W (Dual)	10k*	SP000754044	BAV70WH6433XTMA1	SOT323	80	200	$\leq 1.25$	150			
BAV99S (Quad)	3k*	SP000754046	BAV99SH6327XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAV99S (Quad)	10k*	SP000754048	BAV99SH6433XTMA1	SOT363	80	200	$\leq 1.25$	150			
BAV99U (Quad)	3k*	SP000012613	BAV99UE6327HTSA1	SC74	80	200	$\leq 1.25$	150			
BAW101 (Dual)	3k*	SP000010363	BAW101E6327HTSA1	SOT143	300	250	$\leq 1.3$	100			
BAW101 (Dual)	10k*	SP000010364	BAW101E6433HTMA1	SOT143	300	250	$\leq 1.3$	100			
BAW56S (Quad)	3k*	SP000754060	BAW56SH6327XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAW56S (Quad)	3k*	SP000754064	BAW56SH6727XTSA1	SOT363	80	200	$\leq 1.25$	150			
BAW56U (Quad)	3k*	SP000014993	BAW56UE6327HTSA1	SC74	80	200	$\leq 1.25$	150			
BAW56U (Quad)	10k*	SP000492394	BAW56UE6433HTMA1	SC74	80	200	$\leq 1.25$	150			
SMBD914	3k*	SP000010209	SMBD914E6327HTSA1	SOT23	70	250	$\leq 1.0$	100			
SMBD7000 (Dual)	3k*	SP000014938	SMBD7000E6327HTSA1	SOT23	100	200	$\leq 1.1$	100			

\* order unit

SMD = Surface Mounted Device

# Summary of Types

Type	Ordering Code	Orderable Part Number	Page	Type	Ordering Code	Orderable Part Number	Page		
BTS6142D	SP000264200	BTS6142DAUMA1	136	ESD206-B1-02ELS	15k	SP001117378	ESD206B102ELSE6327XTSA1	184	
BTS6143D	SP000264199	BTS6143DAUMA1	136	ESD206-B1-02ELS	15k	SP001117378	ESD206B102ELSE6327XTSA1	186	
BTS6143D	SP000450414	BTS6143DAUMA2	136	ESD206-B1-02V	15k	SP001107442	ESD206B102VE6327XTSA1	184	
BTS6163D	SP000264201	BTS6163DAUMA1	136	ESD206-B1-02V	15k	SP001107442	ESD206B102VE6327XTSA1	186	
BTS640S2G	SP000528876	BTS640S2GATMA1	135	ESD207-B1-02EL	15k	SP001112362	ESD207B102ELE6327XTMA1	184	
BTS6480SF	SP000408352	BTS6480SXUMA1	139	ESD207-B1-02EL	15k	SP001112362	ESD207B102ELE6327XTMA1	186	
BTS711L1	SP000379623	BTS711L1XUMA1	138	ESD207-B1-02ELS	15k	SP001109118	ESD207B102ELSE6327XTSA1	184	
BTS712N1	SP000317660	BTS712N1XUMA1	138	ESD207-B1-02ELS	15k	SP001109118	ESD207B102ELSE6327XTSA1	186	
BTS716G	SP000313686	BTS716GXUMA1	138	ESD208-B1-02EL	15k	SP001139550	ESD208B102ELE6327XTMA1	184	
BTS716GB	SP000272337	BTS716GBXUMA1	138	ESD208-B1-02EL	15k	SP001139550	ESD208B102ELE6327XTMA1	186	
BTS721L1	SP000317661	BTS721L1XUMA1	138	ESD208-B1-02ELS	15k	SP001131980	ESD208B102ELSE6327XTSA1	184	
BTS723GW	SP000272332	BTS723GXUMA1	137	ESD208-B1-02ELS	15k	SP001131980	ESD208B102ELSE6327XTSA1	186	
BTS724G	SP000313543	BTS724GXUMA1	138	ESD24VL1B-02LRH	15k	SP000960726	ESD24VL1B02LRHE6327XTSA1	185	
BTS730	SP000272333	BTS730XUMA1	135	ESD24VL1B-02LS	15k	SP000943262	ESD24VL1B02LS6327XTSA1	185	
BTS740S2	SP000313545	BTS740S2XUMA1	137	ESD24VS2U	3k	SP000316684	ESD24VS2UE6327HTSA1	185	
BTS7960P	SP000317942	BTN7960PAKSA1	144	ESD300-B1-02LRH	15k	SP001090470	ESD300B102LRHE6327XTSA1	186	
BTS7960S	SP000355960	BTN7960SAKSA1	145	ESD300-B1-02LRH	15k	SP001090470	ESD300B102LRHE6327XTSA1	186	
BTT6020-1EKA	SP001004942	BTT60201EKAXUMA1	136	ESD3V3U1U-02LRH	15k	SP000390728	ESD3V3U1U02LRHE6327XTSA1	185	
BTT6030-1EKA	SP001004944	BTT60301EKAXUMA1	136	ESD3V3U1U-02LS	15k	SP000394145	ESD3V3U1U02LS6327XTSA1	185	
BTT6030-2EKA	SP001004946	BTT60302EKAXUMA1	137	ESD3V3U4ULC	7.5k	SP000844018	ESD3V3U4ULCE6327XTSA1	185	
BTT6050-1EKA	SP001004948	BTT60501EKAXUMA1	136	ESD3V3XU1BL	15k	SP000943406	ESD3V3XU1BLE6327XTSA1	185	
BTT6050-2EKA	SP000866750	BTT60502EKAXUMA1	137	ESD5VOL1B-02V	3k	SP000872146	ESD5VOL1B02VH6327XTSA1	185	
BUZ30A H	SP000682990	BUZ30AHXKSA1	101	ESD5V0S1U-02V	3k	SP000860826	ESD5V0S1U02VH6327XTSA1	185	
BUZ30A H3045A	SP000736082	BUZ30AH3045AATMA1	101	ESD5V0S1U-03W	3k	SP000205608	ESD5V0S1U03WE6327HTSA1	185	
BUZ31 H3046	SP000682994	BUZ31H3046XKSA1	101	ESD5V0S1U-03W	3k	SP000205608	ESD5V0S1U03WE6327HTSA1	186	
BUZ31L H	SP000682996	BUZ31LHXKSA1	101	ESD5V0S2U-06	3k	SP000205610	ESD5V0S2U06E6327HTSA1	185	
<b>D</b>									
DSL70	3k	SP000362209	DSL70E6327HTSA1	186	ESD5V0S4US	3k	SP000753522	ESD5V0S4USH6327XTSA1	185
<b>E</b>									
ESD0P8RFL	15k	SP000362197	ESD0P8RFLE6327XTSA1	184	ESD5V0S5US	3k	SP000753522	ESD5V0S5USH6327XTSA1	186
ESD101-B1-02EL	15k	SP001112354	ESD101B102ELE6327XTMA1	184	ESD5V0S5US	3k	SP000753524	ESD5V0S5USH6327XTSA1	186
ESD101-B1-02EL	15k	SP001112354	ESD101B102ELE6327XTMA1	185	ESD5V3L1B-02LRH	15k	SP000921756	ESD5V3L1B02LRHE6327XTSA1	184
ESD101-B1-02ELS	15k	SP001050534	ESD101B102ELSE6327XTSA1	184	ESD5V3L1B-02LRH	15k	SP000921756	ESD5V3L1B02LRHE6327XTSA1	185
ESD101-B1-02ELS	15k	SP001050534	ESD101B102ELSE6327XTSA1	185	ESD5V3U1U-02LRH	15k	SP000394151	ESD5V3U1U02LRHE6327XTSA1	185
ESD102-U1-02ELS	15k	SP001055318	ESD102U102ELSE6327XTSA1	185	ESD5V3U1U-02LS	15k	SP000394147	ESD5V3U1U02LS6327XTSA1	185
ESD102-U2-099EL	15k	SP001037800	ESD102U2099ELE6327XTSA1	185	ESD5V3U2U-03F	3k	SP000753526	ESD5V3U2U03FH6327XTSA1	185
ESD102-U4-05L	15k	SP001050150	ESD102U405LE6327XTSA1	185	ESD5V3U2U-03LRH	15k	SP000427412	ESD5V3U2U03LRHE6327XTMA1	185
ESD103-B1-02EL	15k	SP001126358	ESD103B102ELE6327XTMA1	184	ESD5V3U4RRS	3k	SP000753528	ESD5V3U4RRSH6327XTSA1	185
ESD103-B1-02EL	15k	SP001126358	ESD103B102ELE6327XTMA1	185	ESD5V3U4U-HDMI	7.5k	SP000485506	ESD5V3U4UHDMI6327XTSA1	185
ESD103-B1-02ELS	15k	SP001077908	ESD103B102ELSE6327XTSA1	184	ESD5V5S1B-02LRH	15k	SP001024008	ESD5V5S1B02LRHE6327XTSA1	186
ESD103-B1-02ELS	15k	SP001077908	ESD103B102ELSE6327XTSA1	185	ESD5V5U5ULC	3k	SP000868506	ESD5V5U5ULCE6327HTSA1	185
ESD105-B1-02EL	15k	SP001165248	ESD105B102ELE6327XTMA1	184	ESD8V0L1B-02LRH	15k	SP000235246	ESD8V0L1B02LRHE6327XTSA1	185
ESD105-B1-02ELS	15k	SP001133746	ESD105B102ELSE6327XTSA1	184	ESD8V0L1B-02LRH	50k	SP000257037	ESD8V0L1B02LRHE6433XTMA1	185
ESD105-B1-02ELS	15k	SP001133746	ESD105B102ELSE6327XTSA1	185	ESD8V0L2B-03L	15k	SP000055122	ESD8V0L2B03LE6327XTMA1	185
ESD108-B1-CSP0201	15k	SP001126862	ESD108B1CSP0201XTSA1	184					
ESD108-B1-CSP0201	15k	SP001126862	ESD108B1CSP0201XTSA1	185					
ESD110-B1-02ELS	15k	SP001061684	ESD110B102ELSE6327XTSA1	184					
ESD112-B1-02EL	15k	SP001113386	ESD112B102ELE6327XTMA1	184					
ESD112-B1-02ELS	15k	SP001061690	ESD112B102ELSE6327XTSA1	184					
ESD113-B1-02ELS	15k	SP001061696	ESD113B102ELSE6327XTSA1	184					
ESD113-B1-02ELS	15k	SP001061696	ESD113B102ELSE6327XTSA1	185					
ESD18VU1B-02LRH	15k	SP000884276	ESD18VU1B02LRHE6327XTSA1	184					
ESD1P0RFS	3k	SP000753518	ESD1P0RFSH6327XTSA1	184					
ESD1P0RFW	3k	SP000753520	ESD1P0RFWH6327XTSA1	184					
ESD200-B1-CSP0201	15k	SP000992756	ESD200B1CSP0201XTSA1	184					
ESD200-B1-CSP0201	15k	SP000992756	ESD200B1CSP0201XTSA1	186					
ESD203-B1-02EL	15k	SP001112360	ESD203B102ELE6327XTMA1	184					
ESD203-B1-02EL	15k	SP001112360	ESD203B102ELE6327XTMA1	186					
ESD203-B1-02ELS	15k	SP001117372	ESD203B102ELSE6327XTSA1	184					
ESD203-B1-02ELS	15k	SP001117372	ESD203B102ELSE6327XTSA1	186					
ESD204-B1-02EL	15k	SP001113390	ESD204B102ELE6327XTMA1	184					
ESD204-B1-02EL	15k	SP001113390	ESD204B102ELE6327XTMA1	186					
ESD204-B1-02ELS	15k	SP001061700	ESD204B102ELSE6327XTSA1	184					
ESD204-B1-02ELS	15k	SP001061700	ESD204B102ELSE6327XTSA1	186					
ESD205-B1-02ELS	15k	SP001014496	ESD205B102ELSE6327XTSA1	184					
ESD205-B1-02ELS	15k	SP001014496	ESD205B102ELSE6327XTSA1	186					
ESD206-B1-02EL	15k	SP001123720	ESD206B102ELE6327XTMA1	184					
ESD206-B1-02EL	15k	SP001123720	ESD206B102ELE6327XTMA1	186					
ESD206-B1-02EL	15k	SP001123720	ESD206B102ELSE6327XTMA1	186					
<b>F</b>									
FZL4146G				SP000087989	FZL4146GGEGHUMA1		162		
<b>I</b>									
ICB1FL02G				SP000204703	ICB1FL02GXUMA1		206		
ICB1FL03G				SP000626792	ICB1FL03GXUMA1		206		
ICB2FL01G				SP000363741	ICB2FL01GXUMA1		206		
ICB2FL02G				SP000555574	ICB2FL02GXUMA1		206		
ICB2FL03G				SP000776684	ICB2FL03GXUMA1		206		
ICE1CS02				SP000444084	ICE1CS02FKLA1		160		
ICE1CS02G				SP000783614	ICE1CS02GXUMA2		160		
ICE1HS01G				SP001077176	ICE1HS01G1XUMA1		161		
ICE2A165FKLA1				SP000013769	ICE2A165FKLA1		158		
ICE2A180Z				SP001056400	ICE2A180ZXKLA1		159		
ICE2A265				SP000013503	ICE2A265FKLA1		158		
ICE2A280Z				SP000956838	ICE2A280ZXKLA1		159		
ICE2HS01G				SP000793084	ICE2HS01GXUMA1		161		
ICE2PC0S1				SP000737922	ICE2PC0S1XKLA1		160		
ICE2PC0S1G				SP000717682	ICE2PC0S1GXUMA1		160		
ICE2PC0S2				SP000741324	ICE2PC0S2GXUMA1		160		
ICE2PC0S2G				SP000718524	ICE2PC0S2GXUMA1		160		
ICE2PC0S3				SP000752402	ICE2PC0S3XKLA1		160		

