

S3AC THRU S3MC

Surface Mount General Rectifiers

Reverse Voltage - 50 to 1000 V

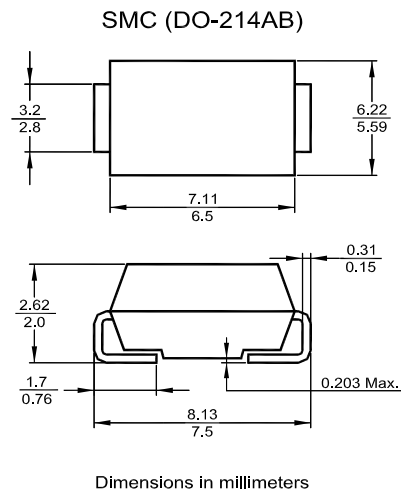
Forward Current - 3 A

Features

- The plastic package carries UL flammability classification 94 V-0
- High forward surge current capability
- Low reverse current

Mechanical Data

- Case: SMC (DO-214AB) molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, method
- Polarity: color band denotes cathode end



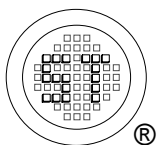
Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	S3AC	S3BC	S3DC	S3GC	S3JC	S3KC	S3MC	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at $T_L = 75\text{ }^\circ\text{C}$	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100							A
Maximum Forward Voltage at $I_F = 3\text{ A}$	V_F	1.15							V
Maximum DC Reverse Current at $T_A = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 125\text{ }^\circ\text{C}$	I_R	10 250							μA
Typical Junction Capacitance ¹⁾	C_J	60							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	53							$^\circ\text{C/W}$
Typical Thermal Resistance ²⁾	$R_{\theta JL}$	16							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150							$^\circ\text{C}$

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V.

²⁾ P.C.B mounted with 0.27" X 0.27" (7 X 7 mm) copper pad areas



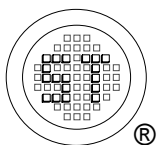
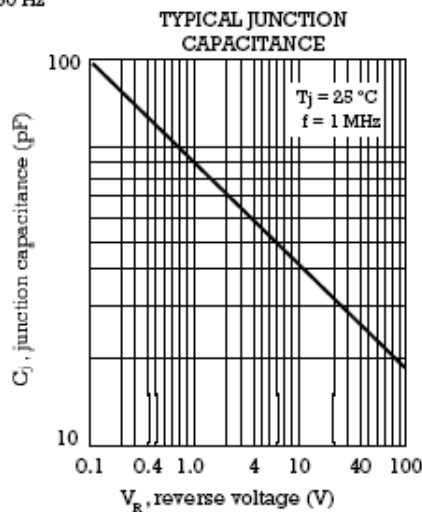
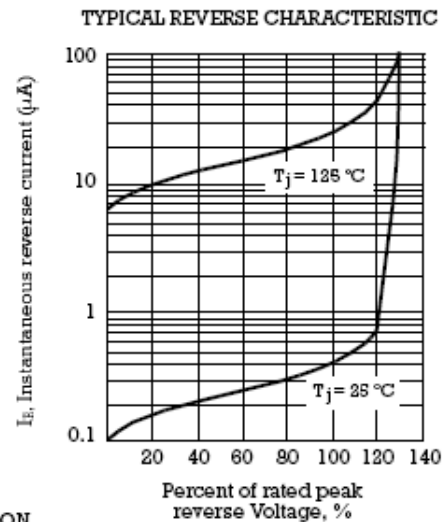
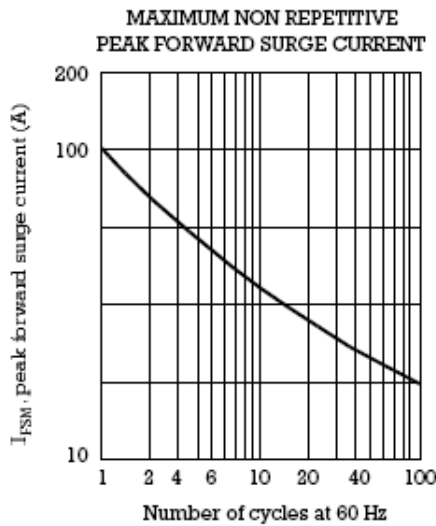
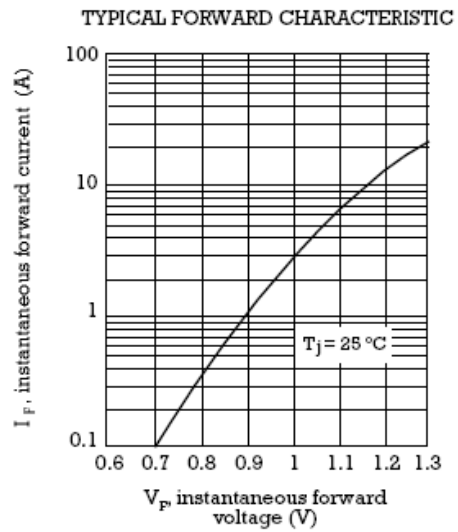
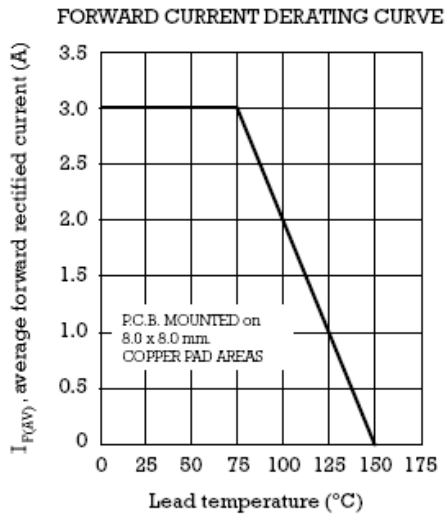
SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 29/04/2010 G Rev:01

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ISO/TS 16949 : 2002 Certificate No. 06103
 ISO 14001 : 2004 Certificate No. 7116
 ISO 9001 : 2008 Certificate No. 0506096
 BS-OHSAS 18001 : 2007 Certificate No. 7116
 IECQ QC 080000 Certificate No. PC/08/04/081

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