

SM4933 THRU SM4937

SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY SILICON RECTIFIERS

Reverse Voltage - 50 to 600 V

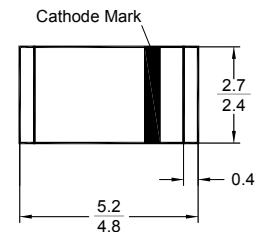
Forward Current - 1 A

Features

- Fast switching
- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction

Mechanical Data

- Case: MELF (DO-213AB) molded plastic
- Mounting position: Any



Plastic case MELF (DO-213AB)
Dimensions in mm

Absolute 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%.

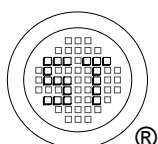
Parameter		Symbols	SM4933	SM4934	SM4935	SM4936	SM4937	Units
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current (at T _A = 55 °C)		I _{F(AV)}	1					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	30					A
Maximum Forward Voltage at 1 A		V _F	1.2					V
Maximum Average Reverse Current at Rated DC Blocking Voltage	at T _A = 25 °C	I _R	5					μA
	at T _A = 125 °C		100					
Maximum Reverse Recovery Time ⁴⁾		t _{rr}	200					ns
Typical Junction Capacitance ¹⁾		C _J	15					pF
Maximum Thermal Resistance		R _{θJA} R _{θJL}	30 ²⁾ 75 ³⁾					°C/W
Operating and Storage Temperature Range		T _J , T _{stg}	- 65 to + 175					°C

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

²⁾ Thermal resistance junction to terminal 6 mm² copper pads to each terminal.

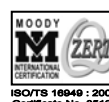
³⁾ Thermal resistance from junction to ambient 6 mm² copper pads to each terminal.

⁴⁾ Test conditions: $I_F = 1\text{ A}$, $V_R = 30\text{ V}$.



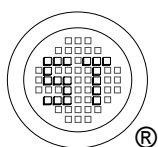
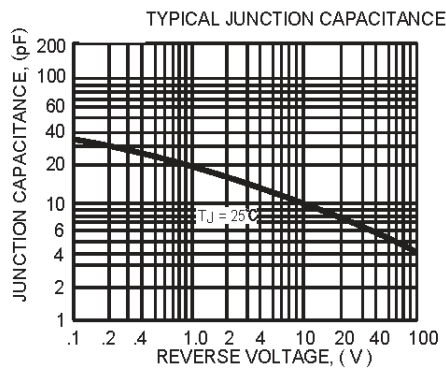
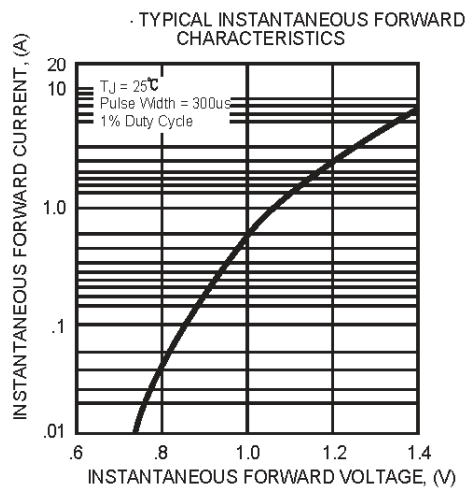
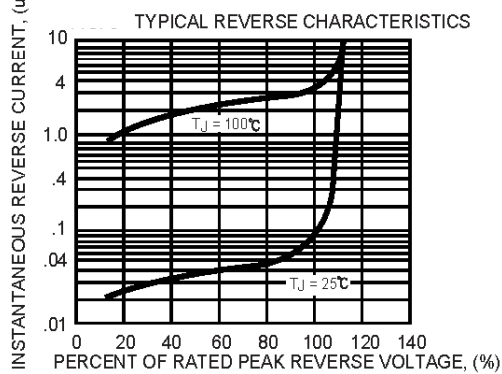
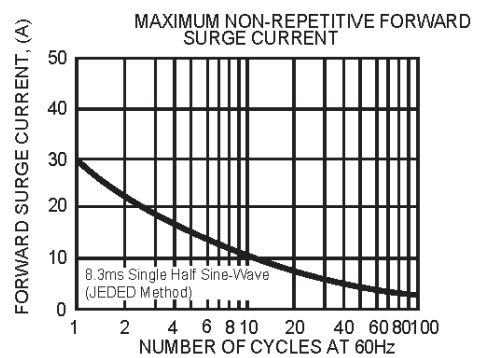
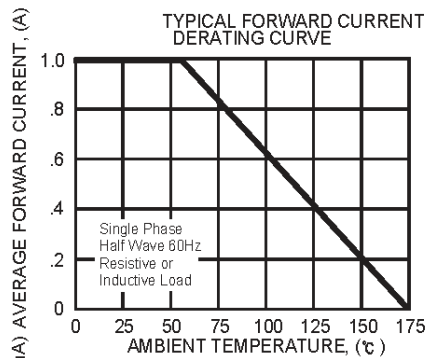
SEMTECH ELECTRONICS LTD.

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



Dated : 23/12/2008

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