

SM4933 THRU SM4937

SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY SILICON RECTIFIERS

Reverse Voltage - 50 to 600 V

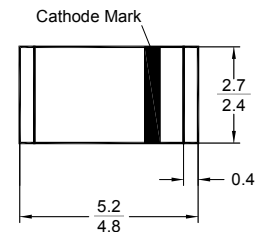
Forward Current - 1 A

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%.

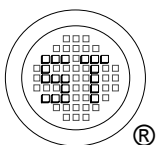
Parameter	Symbols	SM4933	SM4934	SM4935	SM4936	SM4937	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current (at $T_A = 55^\circ\text{C}$)	$I_{F(AV)}$	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 $T_A = 25^\circ\text{C}$	5					μA
	at $T_A = 125^\circ\text{C}$	100					
Maximum Reverse Recovery Time ⁴⁾	t_{rr}	200					ns
Typical Junction Capacitance ¹⁾	C_J	15					pF
Maximum Thermal Resistance	$R_{\theta JA}$	30 ²⁾					$^\circ\text{C/W}$
	$R_{\theta JL}$	75 ³⁾					
Operating and Storage Temperature Range	T_J, T_{stg}	- 65 to + 175					$^\circ\text{C}$

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.

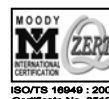
³⁾ Thermal resistance from junction to ambient 6 mm² copper pads to each terminal.

⁴⁾ Test conditions: $I_F = 1$ A, $V_R = 30$ V.

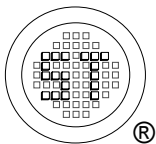
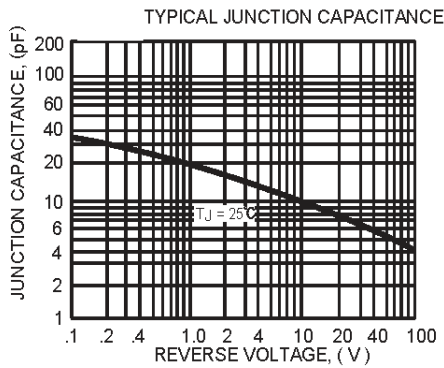
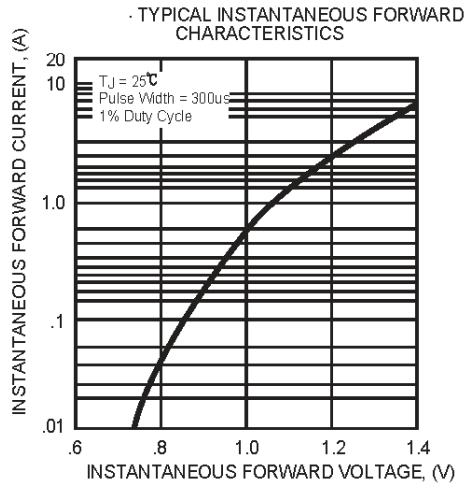
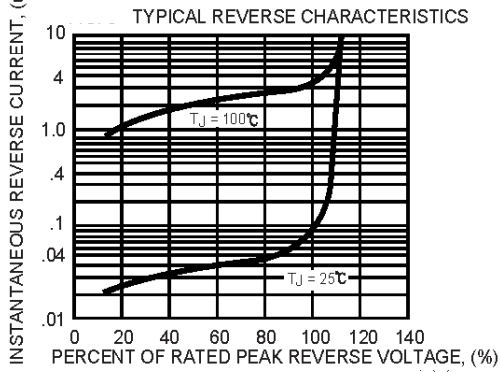
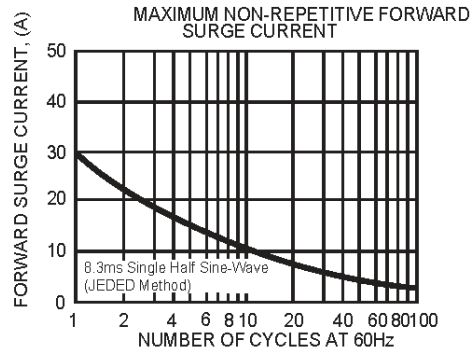
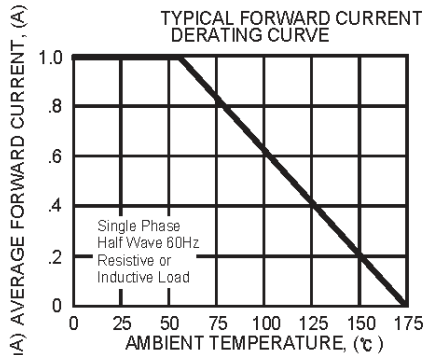


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