DESCRIPTION

The SM4001~SM4007 are available in DO-213AB Package

FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- Available in DO-213AB Package

ORDERING INFORMATION

Package Type	Part Number
DO-213AB	SM4001
	SM4002
	SM4003
	SM4004
	SM4005
	SM4006
	SM4007
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

MECHANICAL DATA

Case: JEDEC DO-213AB, molded plastic over passivated chip

Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.0046 ounces, 0.116gram

Mounting position: Any

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	Unit
Maximum Recurrent 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	500	400	600	800	1000	V
Maximum Average Forward Rectified Current T_A=75°C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage at 1A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=25°C T_A=125°C	I_R	5.0 50							μA
Typical Junction Capacitance NOTE1	C_J	15							pF
Typical Thermal Resistance NOTE2	$R_{\theta JL}$	20							°C/W
Typical Thermal Resistance NOTE3	$R_{\theta JA}$	50							°C/W
Operating Junction Temperature Range	T_J	-55 ~ +175							°C
Storage Temperature Range	T_{STG}	-55 ~ +175							°C

NOTE1: Measured at 1MHz and applied average voltage of 4V D.C.
NOTE2: Thermal resistance junction to lead, 6.0mm 2 copper pads to each terminal.
NOTE3: Thermal resistance junction to ambient, 6.0m 2 copper pads to each terminal.

TYPICAL CHARACTERISTICS

Figure. 1 Typical Forward Current Derating Curve

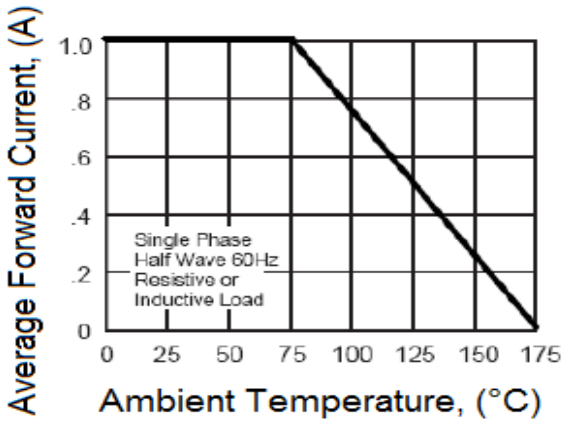


Figure. 2 Maximum Non-Repetitive Forward Surge Current

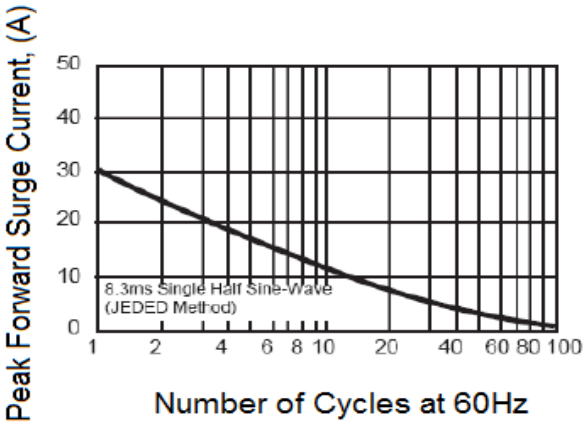


Figure. 3 Typical Instantaneous Forward Characteristics

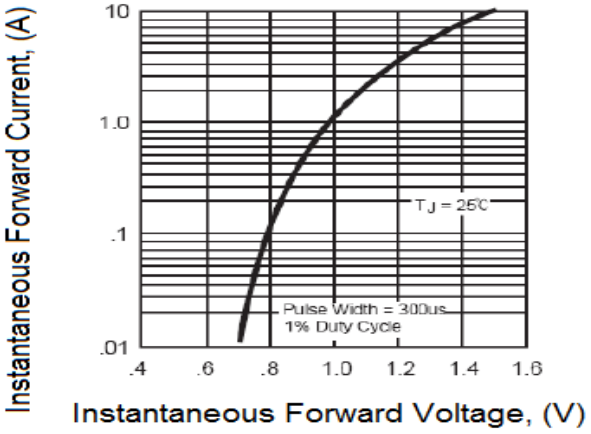


Figure. 4 Typical Reverse Characteristics

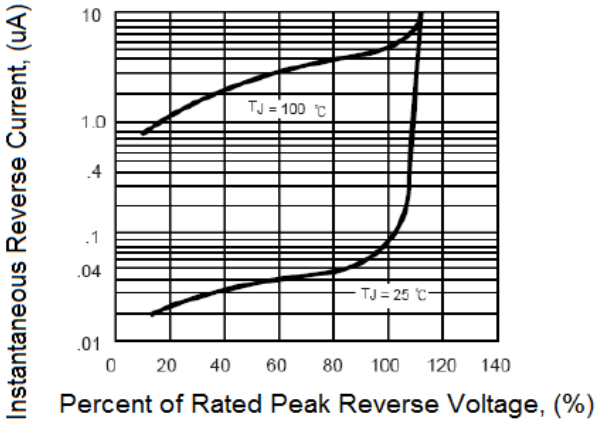
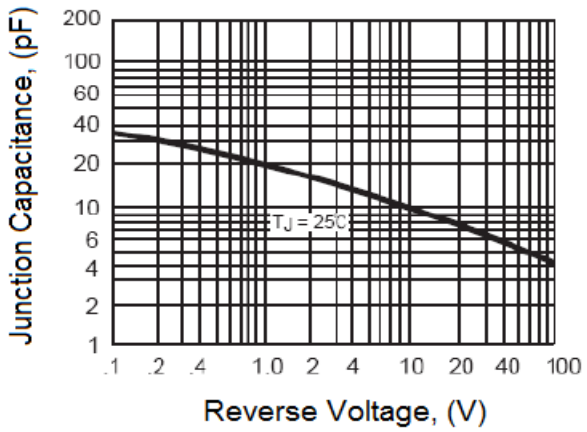
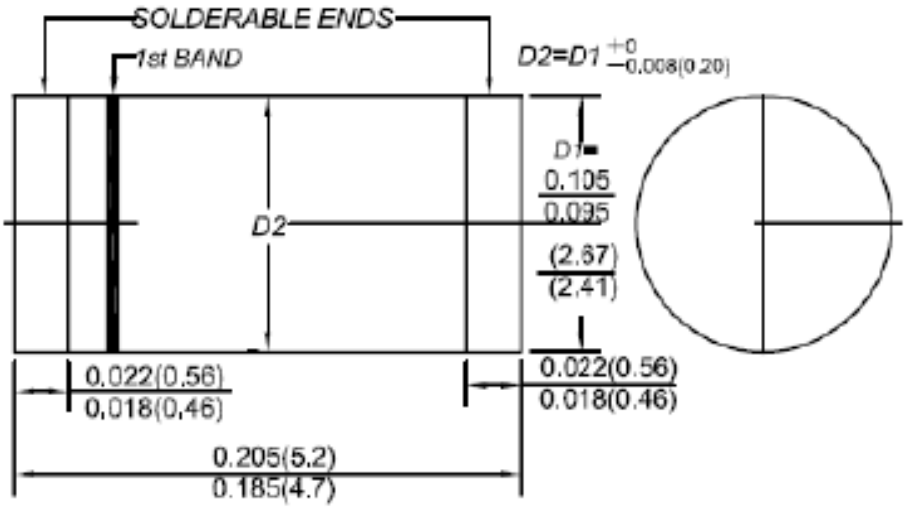


Figure. 5 Typical Junction Capacitance



PACKAGE INFORMATION

Dimension in DO-123AB (Unit: mm)



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