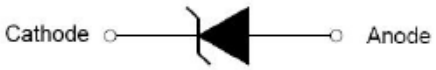
SMB



Features

Low forward voltage drop
Guarding protection
Glass passivated junction
High current capability
High efficiency operation
Extremely low thermal resistance
Halogen free and RoHS compliant

Mechanical Data

CASE: SMBJ(DO-214AA) Molded Plastic
Polarity: Color band denotes cathode end
Mounting position: ANY
Weight: 0.0035 ounces, 0.098 gram

Maximum Ratings & Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.)

CHARACTERISTICS	SYMBOL	SS14B	UNITS
	Marking	SS14	
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RWS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current at T_L=90℃	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40	A
Maximum instantaneous forward voltage at I_{FM}=1.0A (NOTE1)	V_F	0.53	V
Maximum DC reverse current T_J=25℃ at rated DC blocking voltage T_J=125℃	I_R	0.5 50.0	m A
Maximum thermal resistance	$R_{\theta JL}$	80	°C/W
Operating temperature range	T_J	-55 ---- +125	°C
Storage temperature range	T_{STG}	-55 ---- +150	°C

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SMB	Tape/Reel,13" reel	3000	EIA-481-1

Ratings and Characteristic Curves

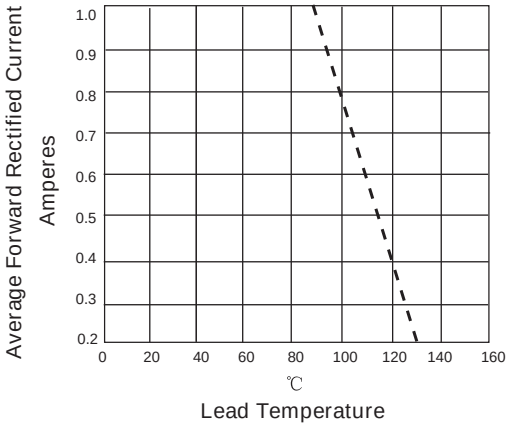


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

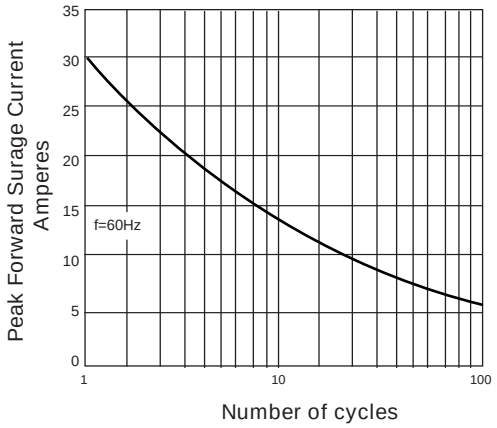


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

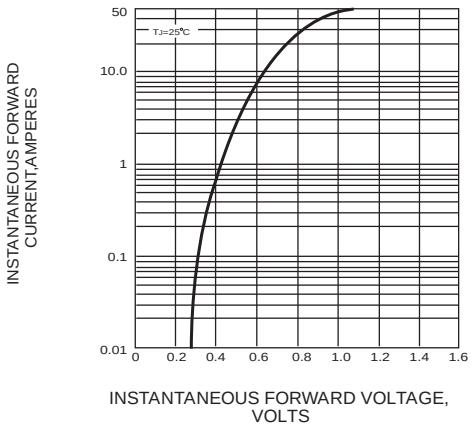


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

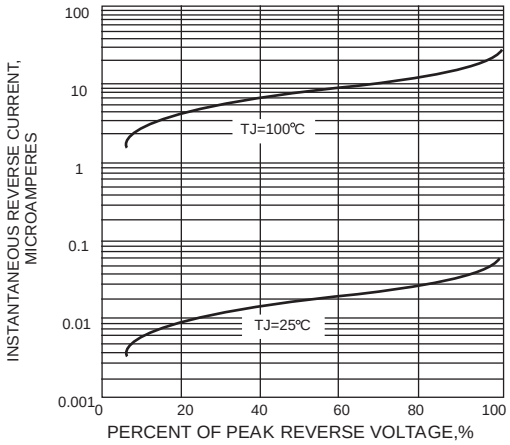
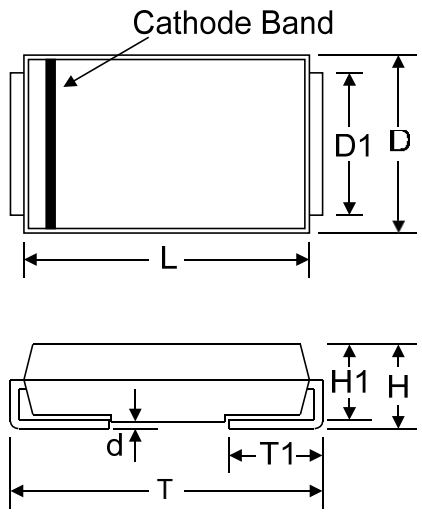


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Package Outline Dimensions: SMB(DO-214AA)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
L	4.4	4.6	0.173	0.181
D	3.5	3.7	0.138	0.146
D1	1.9	2.1	0.075	0.083
T	5.1	5.48	0.201	0.216
T1	1.0	1.6	0.039	0.063
d	-	0.2	-	0.008
H	2.2	2.45	0.087	0.096
H1	2.15	2.35	0.085	0.093