



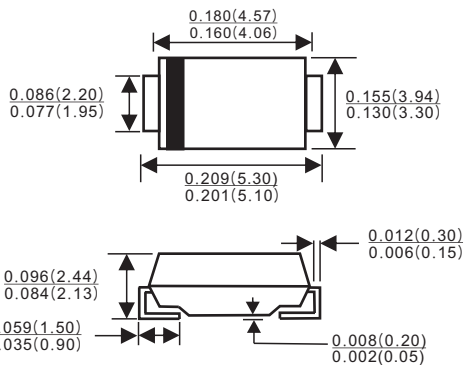
Features

- ✧ Schottky barrier rectifier
- ✧ Guardring protection
- ✧ Low forward voltage
- ✧ Reverse energy tested
- ✧ High current capability
- ✧ Extremely low thermal resistance

Mechanical Data

- ✧ Case: SMB molded plastic body
- ✧ Polarity: Color band denotes cathode end
- ✧ Mounting position: ANY
- ✧ Weight: 0.003 ounces, 0.093 gram

SMB/DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		10BQ100	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RWS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40	A
Maximum instantaneous forward voltage at $I_{FM}=1.0\text{A}$ (NOTE1)	V_F	0.85	V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$	I_R	0.2	m A
		6.0	
Maximum thermal resistance	$R_{\theta JL}$	28	$^\circ\text{C/W}$
Operating temperature range	T_J	-55 ---- +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ---- +150	$^\circ\text{C}$

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

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

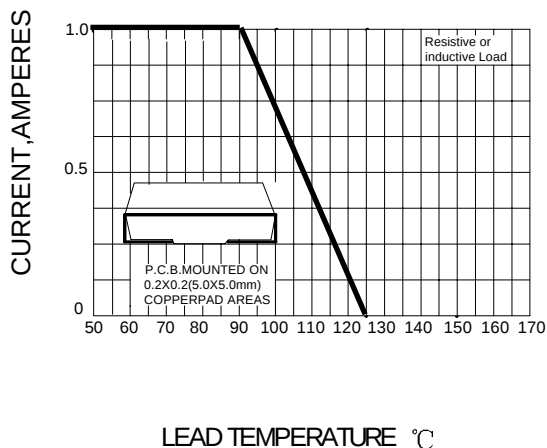


FIG.2– PEAK FORWARD SURGE CURRENT

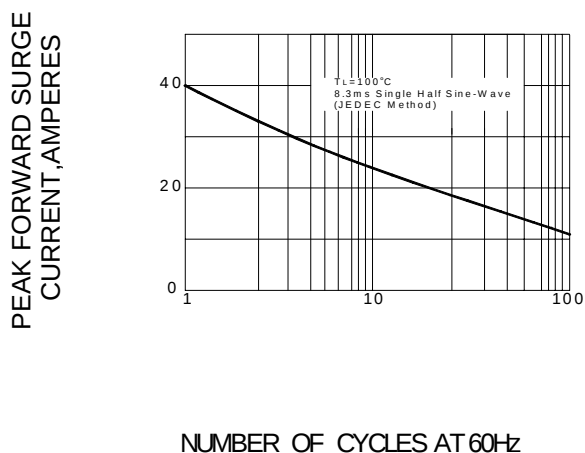


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

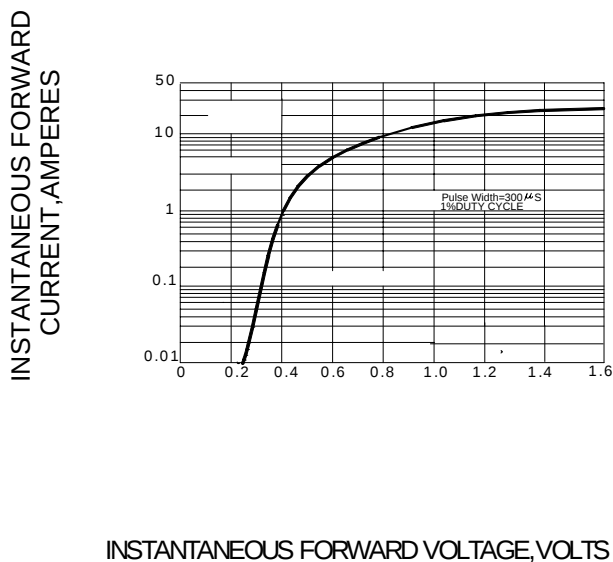
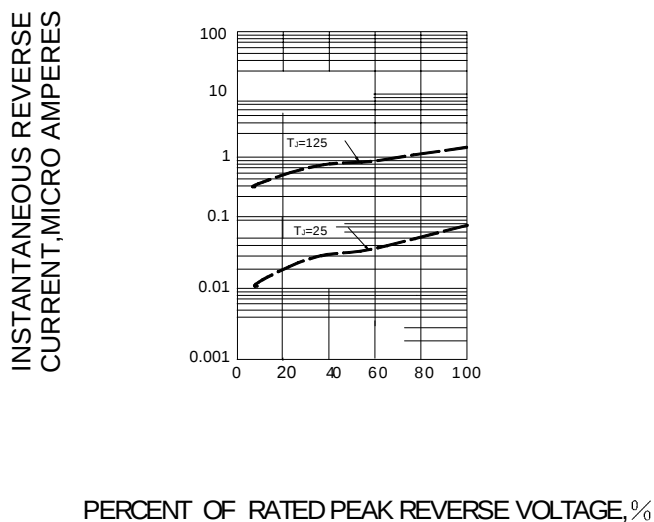


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00