



10BQ100

Surface Mount Schottky Barrier Rectifiers

REVERSE VOLTAGE: 100 V

FORWARD CURRENT: 1.0 A

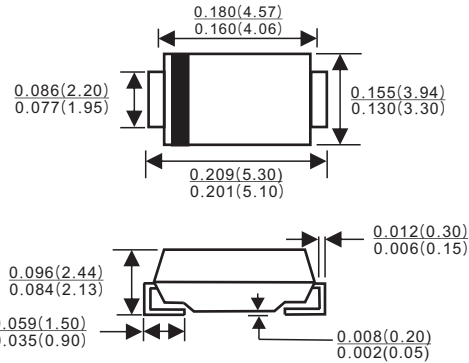
Features

- ✧ 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 $T_L=90^{\circ}C$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40	A
Maximum instantaneous forward voltage at $I_{FM}=1.0A$ (NOTE1)	V_F	0.85	V
Maximum DC reverse current $T_J=25^{\circ}C$ at rated DC blocking voltage $T_J=125^{\circ}C$	I_R	0.5 5.0	m A
Maximum thermal resistance	$R_{\theta JL}$	28	$^{\circ}C/W$
Operating temperature range	T_J	-55 ---- +125	$^{\circ}C$
Storage temperature range	T_{STG}	-55 ---- +150	$^{\circ}C$

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

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

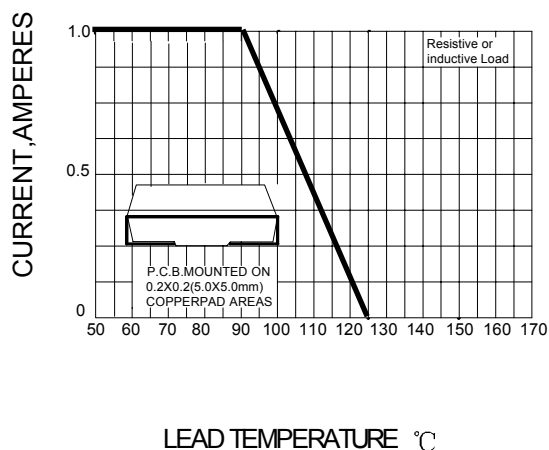


FIG.2– PEAK FORWARD SURGE CURRENT

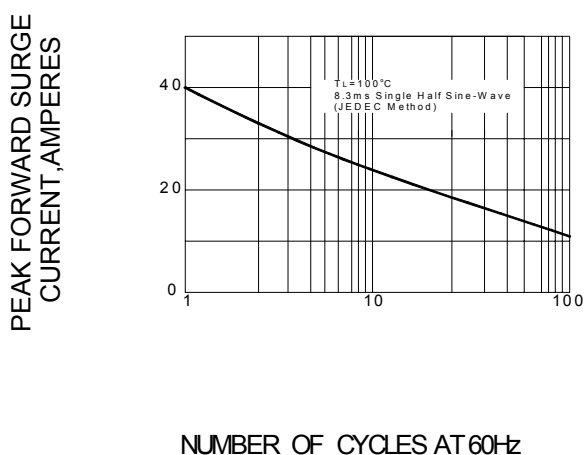


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

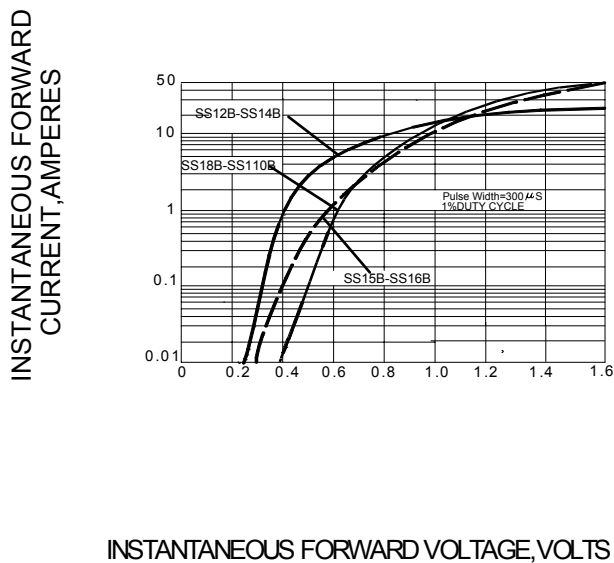


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

