

Surface Mount Schottky Barrier Rectifiers

REVERSE VOLTAGE: 20 - 100 V

FORWARD CURRENT: 1.0 A

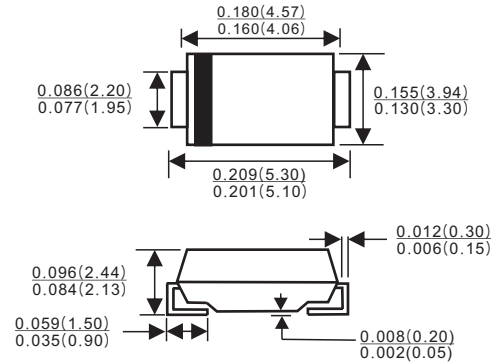
Features

- ✧ 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

		SS12B	SS13B	SS14B	SS15B	SS16B	SS18B	SS19B	SS110B	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V	
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	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	0.50			0.75		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					0.5				m A
Maximum thermal resistance	$R_{\theta JL}$	6.0					5.0				°C/W
Maximum thermal resistance	$R_{\theta JL}$	28									°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 %

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

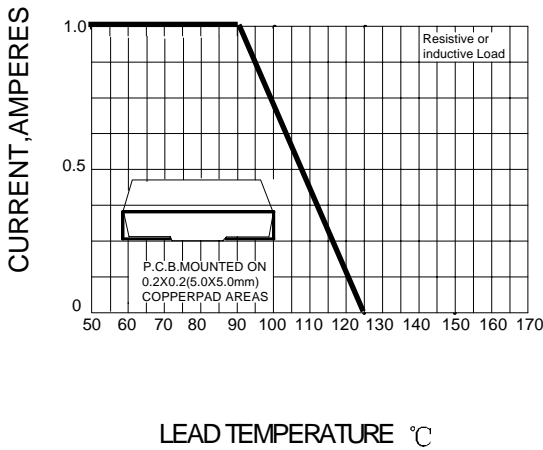


FIG.2– PEAK FORWARD SURGE CURRENT

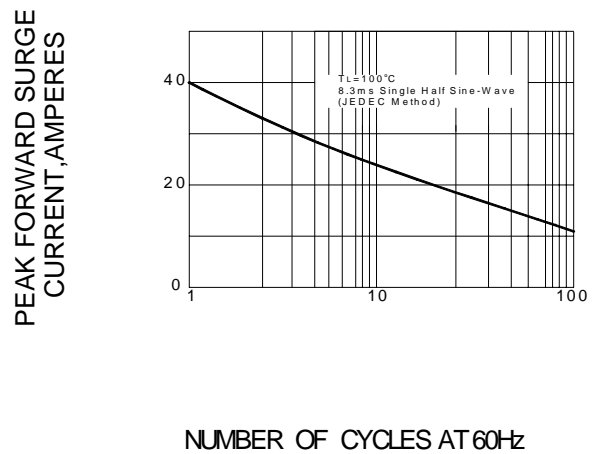


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

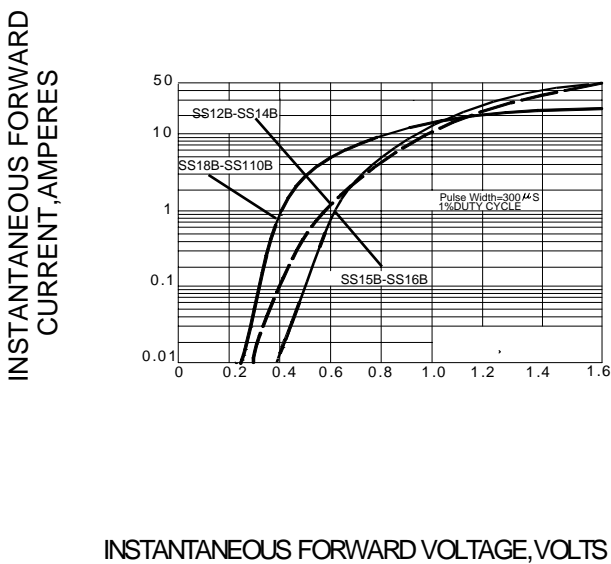


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

