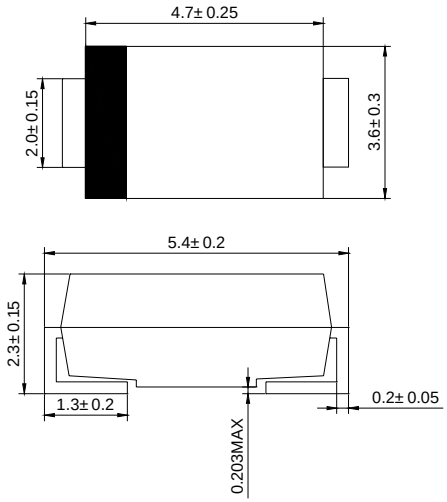
SK12B-SK110B

Surface Mount Schottky Barrier Rectifiers

REVERSE VOLTAGE: 20 - 100 V
FORWARD CURRENT: 1.0 A



SMB



Dimensions in millimeters

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK19B	SK110B	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℃	$I_{F(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	30.0								A
Maximum instantaneous forward voltage at I_{FM}=1.0A (NOTE1)	V_F	0.50			0.70		0.85			V
Maximum DC reverse current T_J=25℃ at rated DC blocking voltage T_J=100℃	I_R	0.5 20								m A
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 %

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Ratings AND Charactieristic Curves

FIG.1 -- FORWARD DERATING CURVE

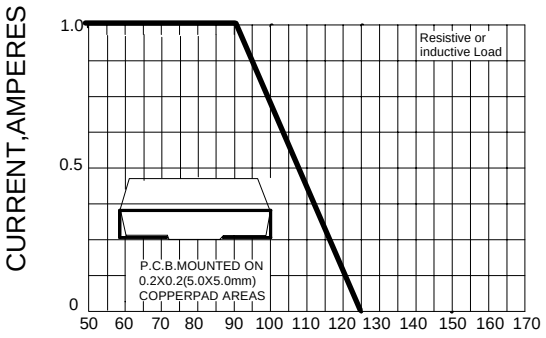

FIG.2-- PEAK FORWARD SURGE CURRENT

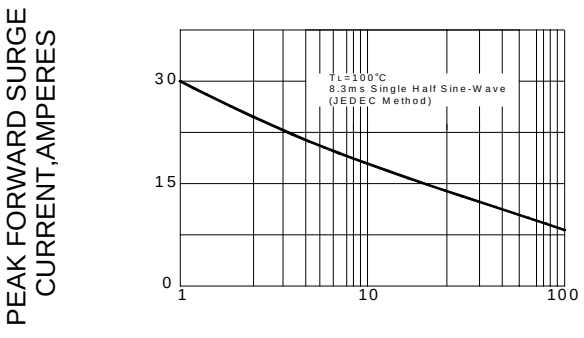

FIG.3 – TYPICAL FORWARD CHARACTERISTICS

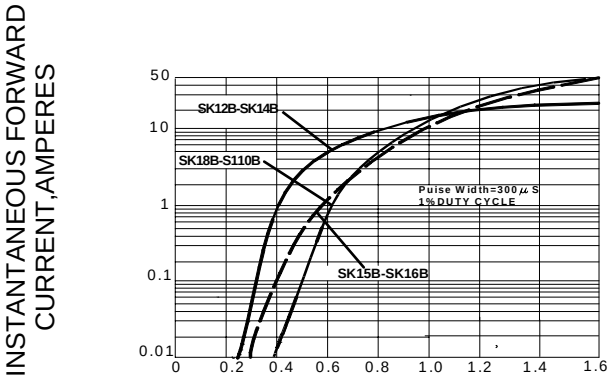

FIG.4 – TYPICAL REVERSE CHARACTERISTICS

