



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



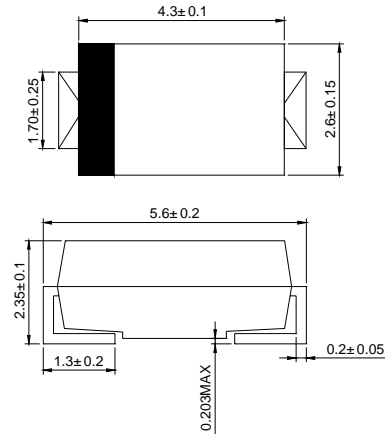
SMAJ

Features

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

Mechanical Data

- ◇ Case: SMAJ molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.003 ounces, 0.084 grams



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Type Number	Symbol	SS12J	SS13J	SS14J	SS15J	SS16J	SS18J	SS19J	SS110J	UNITS	
Device marking code		SS12	SS13	SS14	SS15	SS16	SS18	SS19	S110		
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	0.55			0.70		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					0.1				mA
		6.0			5.0						
Maximum thermal resistance	$R_{\theta JL}$	28								°C/W	
Operating temperature range	T_J	-55 ---- +150					-55 --- +175				°C
Storage temperature range	T_{STG}	-55 ---- +150					-55 --- +175				°C

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



Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

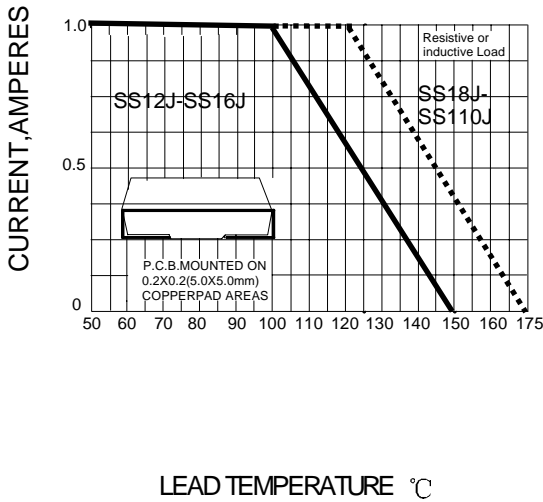


FIG.2– PEAK FORWARD SURGE CURRENT

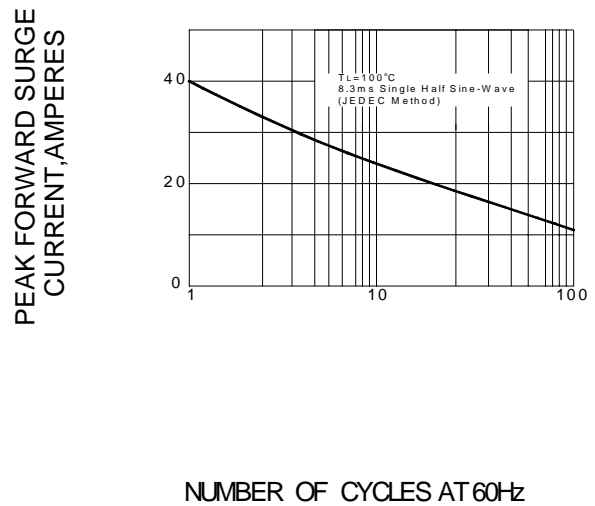


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

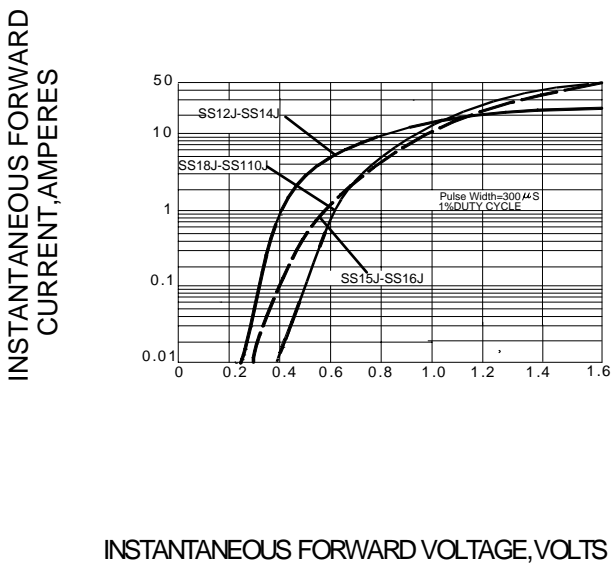
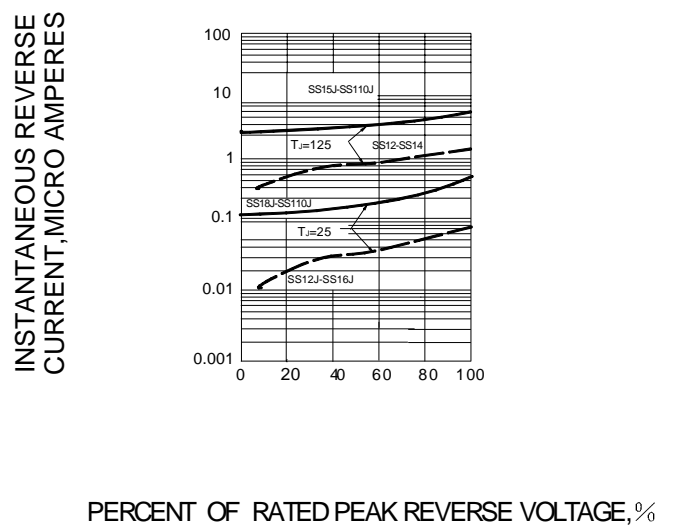


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00