

SS1040C THRU SS10200C

10.0AMP. LOW VF Schottky Barrier Rectifiers

Reverse Voltage: 40-200Volts

Forward Current:10.0Amperes



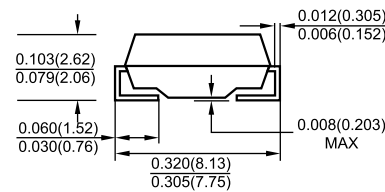
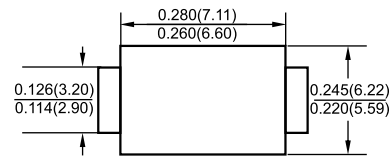
Features

- ◇ Ideal for automated placement
- ◇ Ultrafast reverse recovery time
- ◇ Schottky barriler rectifier
- ◇ Guardring protection
- ◇ Low forward voltage drop
- ◇ Low power loss,high efficiency
- ◇ High current capability
- ◇ High temperature soldering:
260°C/10 seconds at terminals
- ◇ Lead free finish ,Rohs and WEEE compliant.

Mechanical Data

- ◇ Case:JEDEC SMC/DO-214AB molded plastic body
- ◇ Polarity:Laser band denotes cathode end
- ◇ Terminals:Solder plated,solderable per
J-STD-002B and JESD22-B102D
- ◇ Mounting position:ANY
- ◇ Weight:1.0 gram

SMC/DO-214AB



Dimensions in millimeters

MAXIMUM RATING AND ELELTRICAL CHARACTERISTICS

Ratings at 25°C ambient tepmerature unless otherwise specified

Chatacteristics	Symbol	SS10 40C	SS10 45C	SS10 50C	SS10 60C	SS10 80C	SS10 100C	SS10 150C	SS10 200C	Units
Marking Code		SS10 40	SS10 45	SS10 50	SS10 60	SS10 80	SS10 100	SS10 150	SS10 200	
Maximum repetitive peak reverse voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RWS}	28	31.5	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	40	45	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	10.0								A
Peak forward surge current 8.3ms half-sine-wave superimposed on rated load.	I_{FSM}	250								A
Maximum instantaneous forward voltage	$I_F=10.0A, T_J=25^\circ C$	V_F	0.55	0.70	0.85	0.85				V
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ C$	I_R	100			10				μA
	$T_J=100^\circ C$	I_R	20.0			10				mA
Typical junction capacitance(note1)	C_j	780								pF
Thermal resistance,junction-to-ambient(note2)	$R_{\theta JA}$	60								$^\circ C/W$
	$R_{\theta JC}$	20								$^\circ C/W$
	$R_{\theta JL}$	15								$^\circ C/W$
Operating temperature range	T_J	-55-----+150				-55-----+175				$^\circ C$
Storage temperature range	T_{STG}	-55-----+150				-55-----+175				$^\circ C$

Note1: Measured at 1.0MHz and Applied reverse Voltage of 4.0V D.C.

Note2: Device mounted on p.c.b. with 10 mm x 20 mm x 0.1 mm copper pad area.



RATING AND CHARACTERISTICS CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

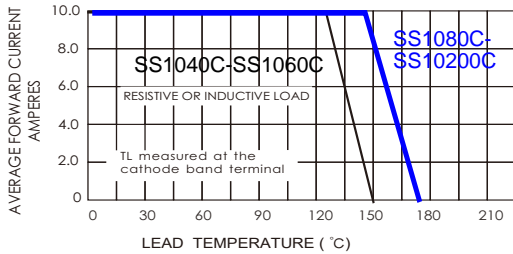


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT

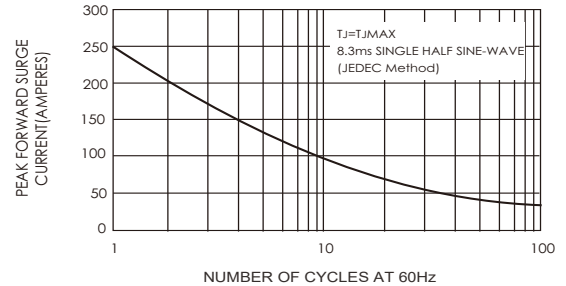


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(SS1040-SS1045)

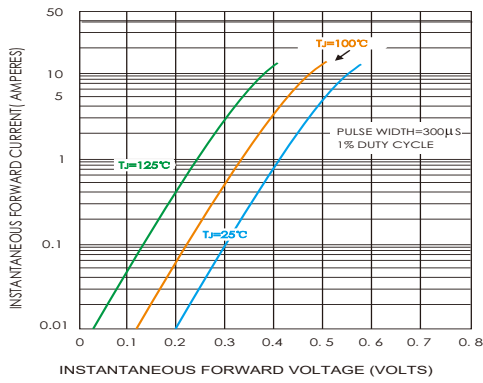


FIG.4-TYPICAL REVERSE CHARACTERISTICS

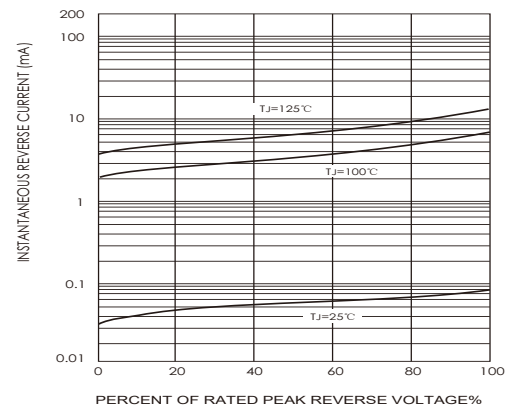


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(SS1080-SS10200)

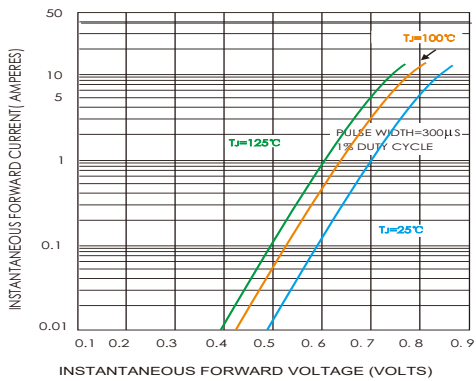


FIG.6-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(SS1050-1060)

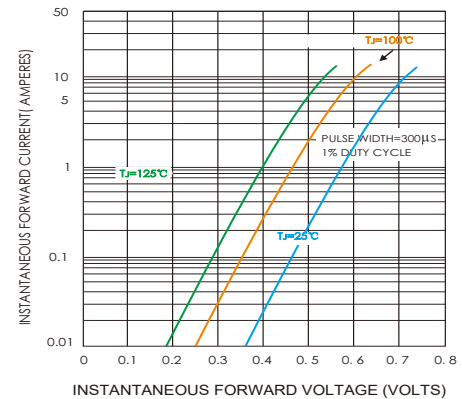
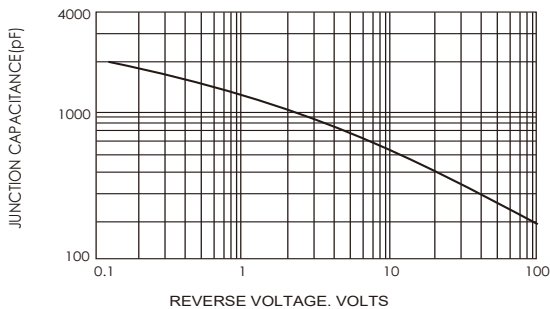


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMC	3000/REEL	42000	36X36X36.5	18.50	15.50