

SS1040 THRU SS10200

10.0AMP. LOW VF Schottky Barrier Rectifiers

Reverse Voltage: 40-200Volts

Forward Current:10.0Amperes



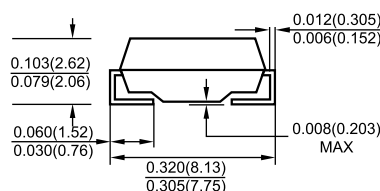
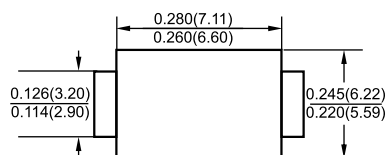
Features

- ◇ 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 40	SS10 45	SS10 50	SS10 60	SS10 80	SS10 100	SS10 150	SS10 200	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}	150								A
Maximum instantaneous forward voltage	IF=10.0A, T _J =25℃	V _F	0.55	0.70			0.85		0.85		V
Maximum DC reverse current at rated DC blocking voltage	T _J =25℃	I _R	100				10				μ A
	T _J =100℃	I _R	20.0				10				mA
Typical junction capacitance(note1)		C _j	780								pF
Thermal resistance,junction-to-ambient(note2)		R _{θJA}	60								℃/W
		R _{θJC}	20								℃/W
		R _{θJL}	15								℃/W
Operating temperature range		T _J	-55-----+150				-55-----+175				℃
Storage temperature range		T _{STG}	-55-----+150				-55-----+175				℃

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

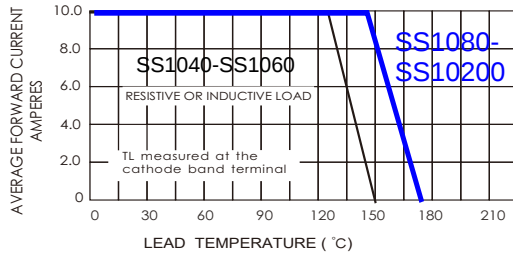


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT

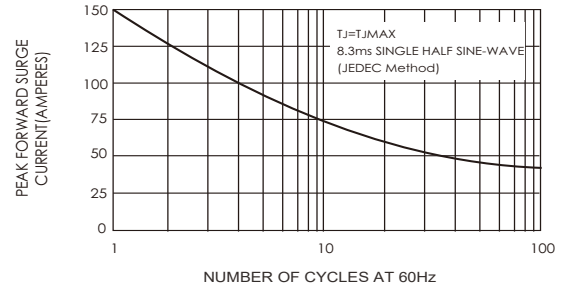


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(SS1040-SS1045)

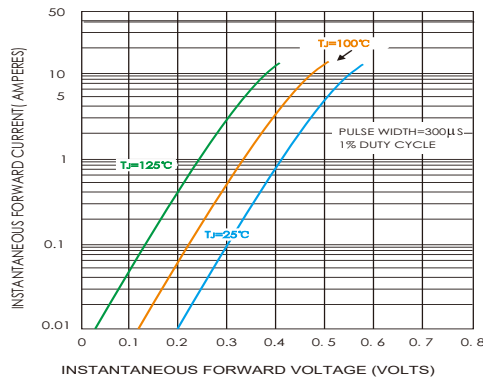


FIG.4-TYPICAL REVERSE CHARACTERISTICS

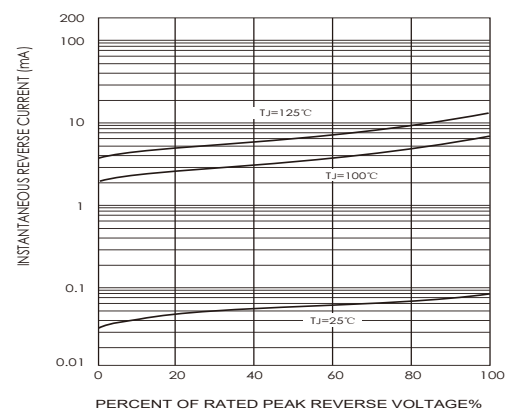


FIG.5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(SS1080-SS10200)

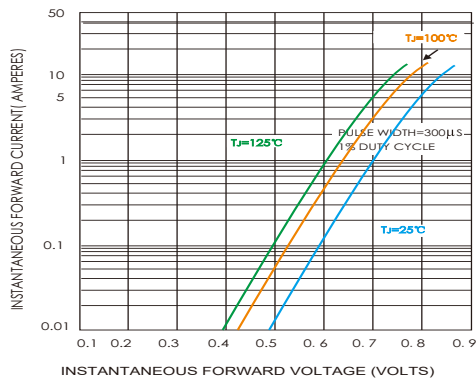


FIG.6-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS(SS1050-1060)

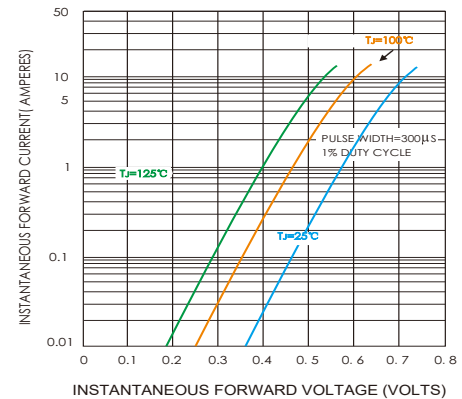
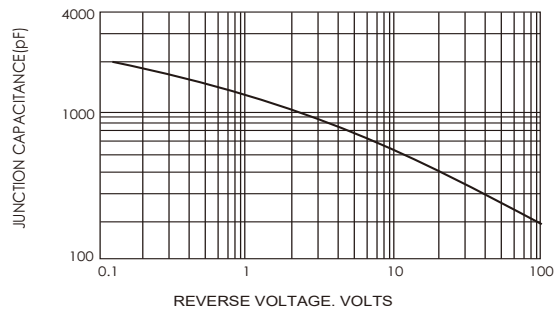


FIG.5-TYPICAL JUNCTION CAPACITANCE



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