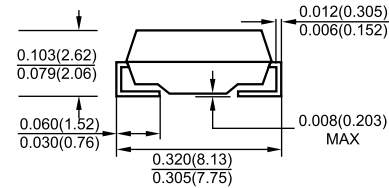
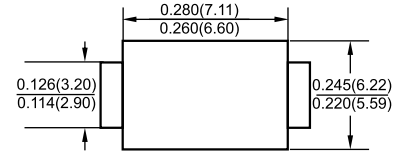




SMC/DO-214AB

Features

- ✧ FOR SURFACE MOUNTED APPLICATIONS
- ✧ LOW PROFILE PACKAGE
- ✧ BUILT-IN STRAIN RELIEF
- ✧ EASY PICK AND PLACE
- ✧ PLASTIC MATERIAL USED CARRIES UNDERWRITERS
- ✧ LABORATORY CLASSIFICATION 94 V-0
- ✧ EXTREMELY LOW VF
- ✧ MAJORITY CARRIER CONDUCTION
- ✧ HIGH TEMPERATURE SOLDERING : 260°C//10 SECONDS AT TERMINALS



Mechanical Data

- ✧ CASE : DO-214AB(SMC)
- ✧ TERMINALS : SOLDER PLATED
- ✧ POLARITY : INDICATED BY CATHODE BAND
- ✧ WEIGHT : 0.22GRAMS

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified
Resistive or inductive load

Parameter		SS82C	SS83C	SS84C	SS85C	SS86C	SS88C	SS89C	SS810C		
Marking code	SYMBOL	SS82	SS83	SS84	SS85	SS86	SS88	SS89	SS810	UNITS	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts	
Maximum Average Forward Current .375" (9.5mm) lead length at $T_L = 75^\circ C$	$I_{(AV)}$	8.0								Amps	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200								Amps	
Maximum Instantaneous Forward Voltage at 8.0A	V_F	0.45	0.55	0.70			0.85			Volts	
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R	0.5						0.1			mA
		20						10			
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JA}$	75									$^\circ C / W$
	$R_{\theta JL}$	20									
Operating Junction Temperature Range	T_J	-55 to +150						-55 to +175			$^\circ C$
Storage and Operating Temperature Range	T_{STG}	-55 to +150						-55 to +175			$^\circ C$

NOTES :

1. Pulse test with $PW=300 \mu sec$, 1% duty cycle
2. Mounted on P.C.Board with $8mm^2$ (0.13mm thick) copper pad areas



Ratings AND Characteristic Curves

Fig.1 - FORWARD CURRENT DERATING CURVE

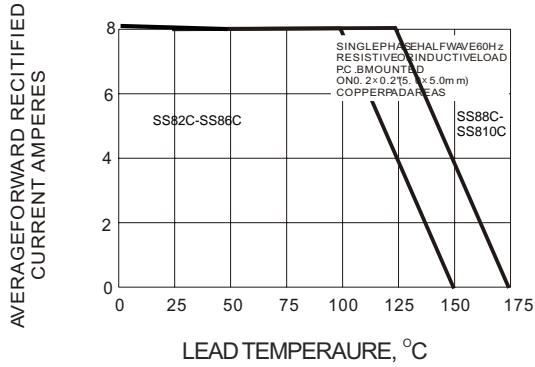


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

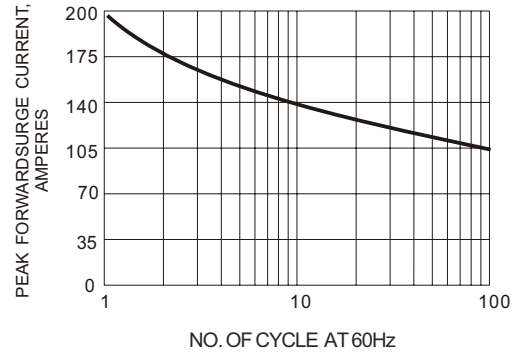


FIG.3-TYPICAL FORWARD CHARACTERISTICS

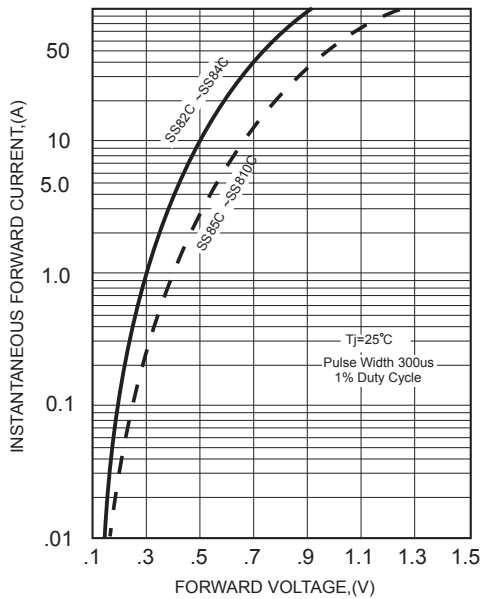
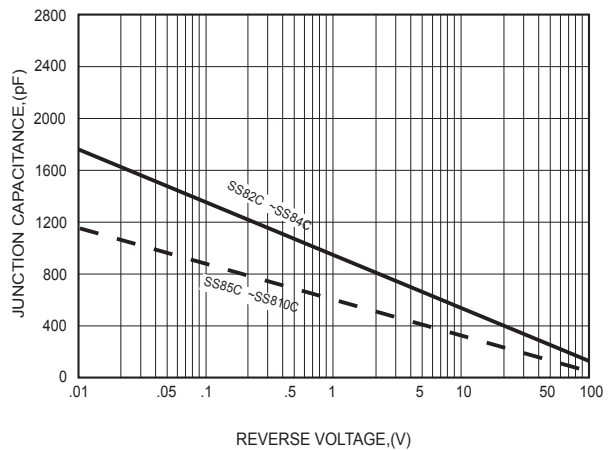


FIG.4-TYPICAL JUNCTION CAPACITANCE



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