



Reverse Voltage - 20 to 100 Volts  
Forward Current - 8.0 Amperes

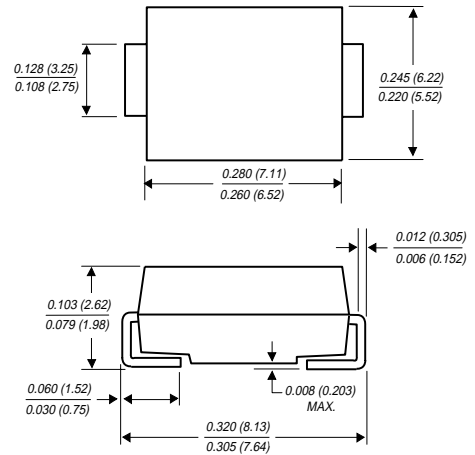
### Features

- 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

#### DO-214AB



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SS82	SS83	SS84	SS85	SS86	SS88	SS810	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	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)	$I_{FSM}$	150							Amps
Maximum Instantaneous Forward Voltage at 8.0A	$V_F$	0.55		0.75		0.85		Volts	
Maximum DC Reverse Current $T_A = 25^\circ C$ at Rated DC Blocking Voltage $T_A = 100^\circ C$	$I_R$	1.0 20							mA
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	75 20							$^\circ C / W$
Operating Junction Temperature Range	$T_J$	-50 to +125							$^\circ C$
Storage and Operating Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

#### 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 SS82 THRU SS810

Fig.1 - FORWARD CURRENT DERATING CURVE

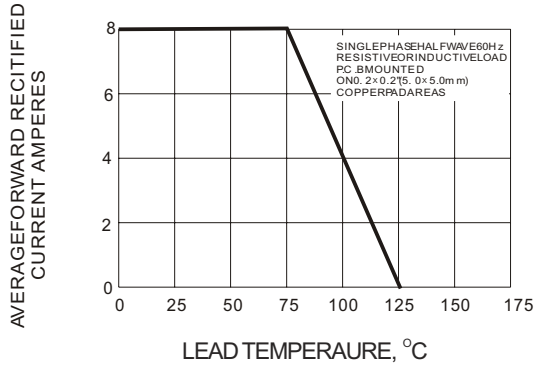


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

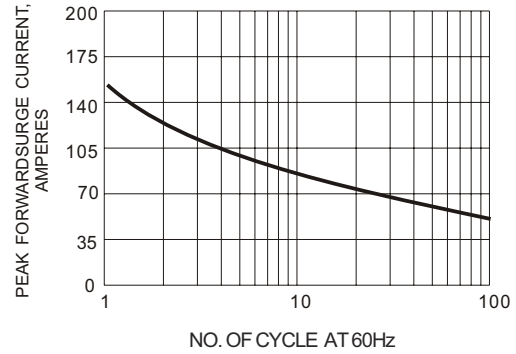


FIG.3-TYPICAL FORWARD CHARACTERISTICS

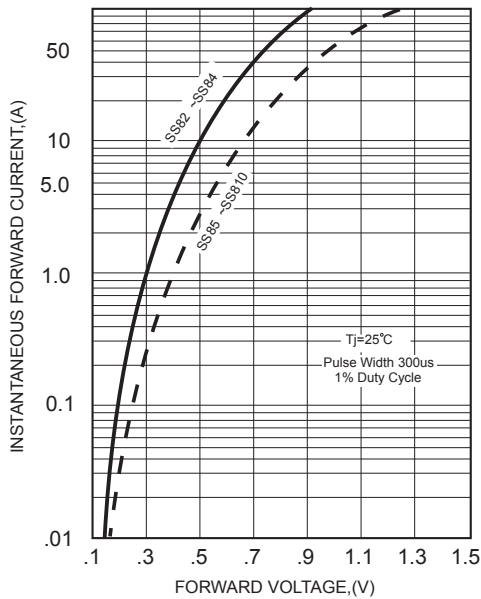


FIG.4-TYPICAL JUNCTION CAPACITANCE

