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8A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

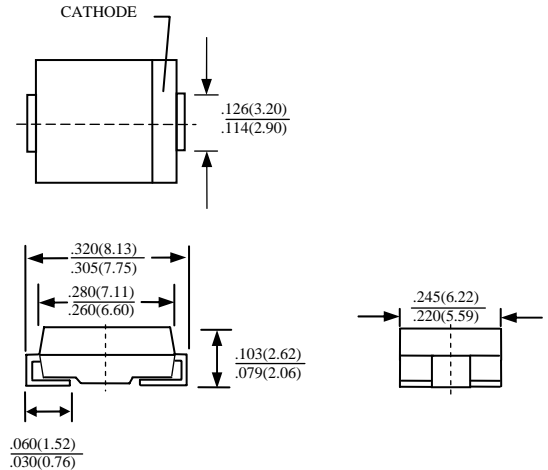
SS82-LFR THRU SS86-LFR

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: 250°C/10 SECONDS AT TERMINALS
- ROHS

MECHANICAL DATA

- CASE: MOLDED PLASTIC, DO-214AB (SMC), DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDER PLATED
- POLARITY INDICATED BY CATHODE BAND
- WEIGHT 0.21 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SS82-LFR	SS83-LFR	SS84-LFR	SS85-LFR	SS86-LFR	UNITS	
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	20	30	40	50	60	V	
MAXIMUM RMS VOLTAGE	V_{RMS}	14	21	28	35	42	V	
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	20	30	40	50	60	V	
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1	I_O	8.0						A
MAXIMUM OVERLOAD SURGE 8.3ms SINGLE HALF SINE-WAVE	I_{FSM}	160						A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	300						PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	17						°C/W
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JA}$	55						°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150						°C
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 125						°C

ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SS82-LFR	SS83-LFR	SS84-LFR	SS85-LFR	SS86-LFR	UNITS
MAXIMUM FORWARD VOLTAGE AT 8.0A AND 25°C	V_F	0.55			0.70		V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	1.0					mA

- NOTE: 1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. P.C.B. MOUNTED 0.55"×0.55 "(14×14 mm) 0.013mm THICK COPPER PAD AREAS

RATINGS AND CHARACTERISTIC CURVES SS82-LFR THRU SS86-LFR

FIG. 1 - FORWARD CURRENT DERATING CURVE

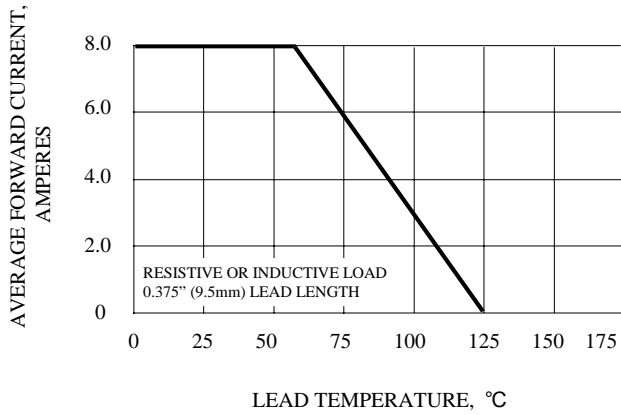


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

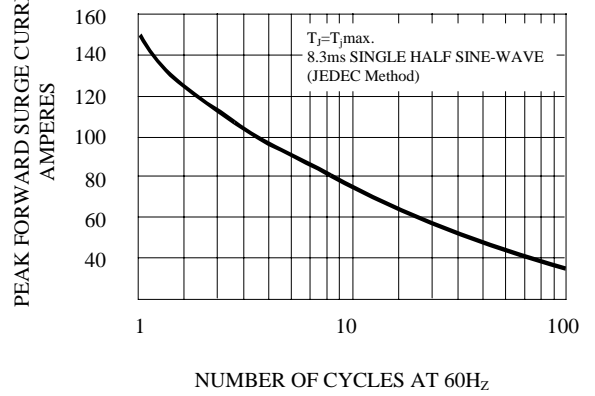


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

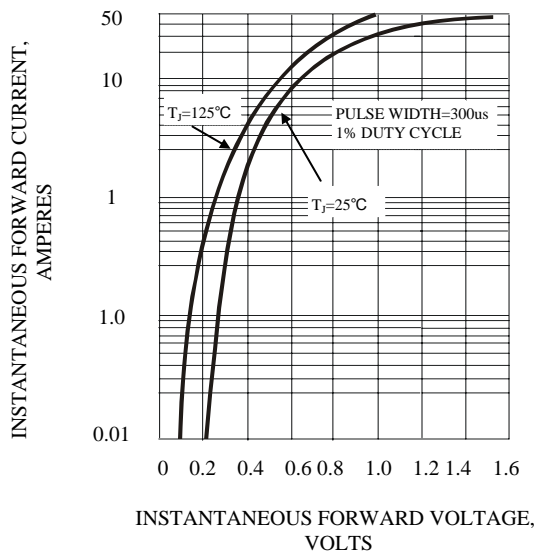


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

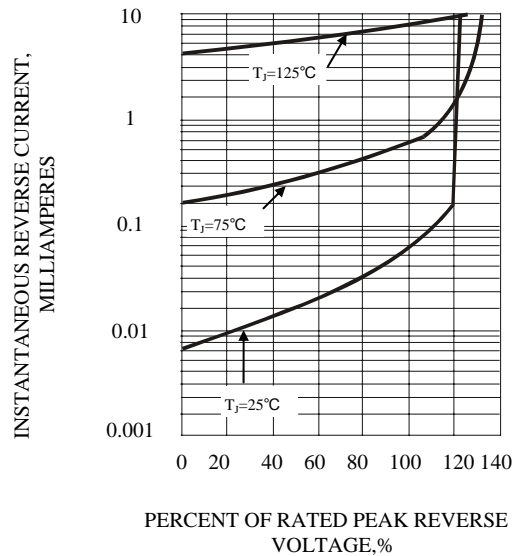


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

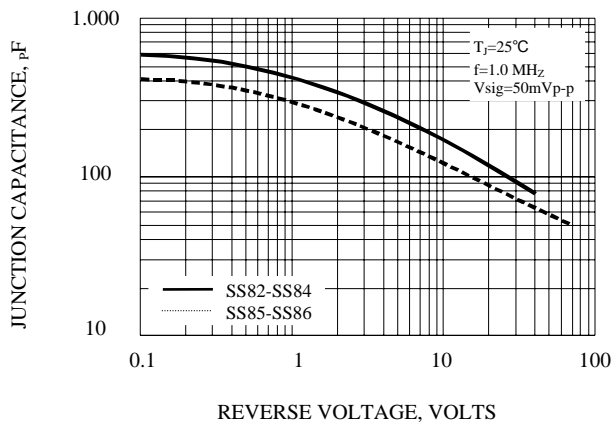


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

