

## 8A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Dim.	Value Inch[mm]	
	Min.	Max.
A	0.305[7.75]	0.320[8.13]
B	0.260[6.60]	0.280[7.11]
C	0.220[5.59]	0.245[6.22]
D	0.079[2.01]	0.103[2.62]
E	0.030[0.76]	0.060[1.52]
F	0.114[2.90]	0.126[3.20]

**PRODUCT FEATURES**

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. EXTREMELY LOW  $V_F$
3. MAJORITY CARRIER CONDUCTION
4. BUILT-IN STRAIN RELIEF
5. LOW PROFILE
6. CASE: MOLDED PLASTIC, DO-214AB (SMC)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. POLARITY: INDICATED BY CATHODE BAND
9. WEIGHT 0.21 GRAMS
10. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +125°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	$I_O$	8	A
PEAK FWD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE	$I_{FSM}$	160	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	$C_j$	300	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JA}$	55	°C/W
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	17	°C/W
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	1000	uA

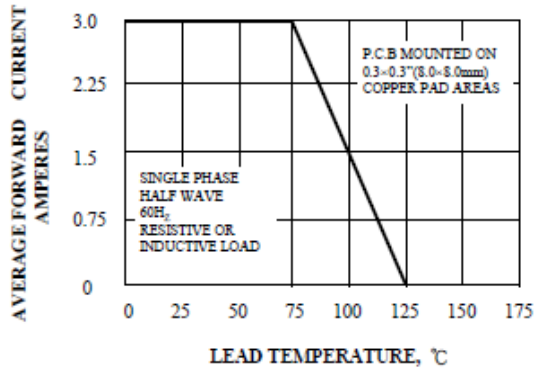
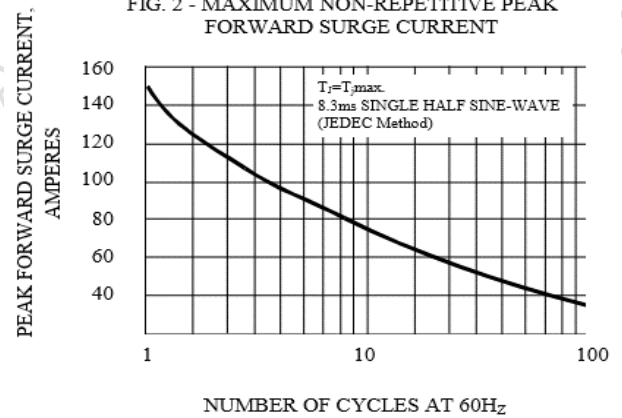
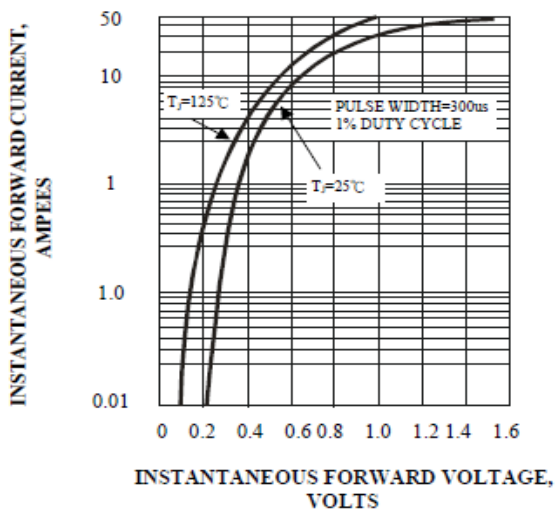
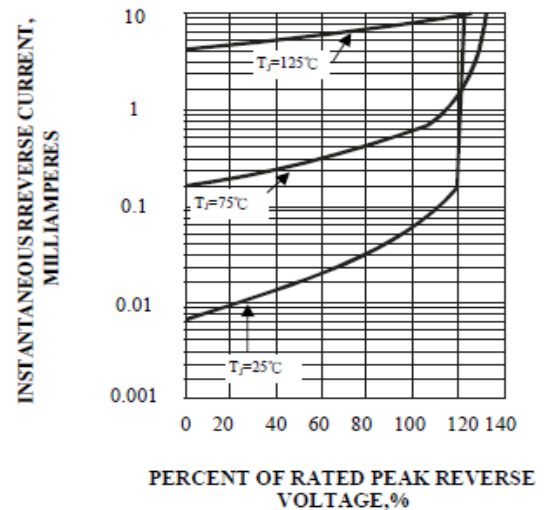
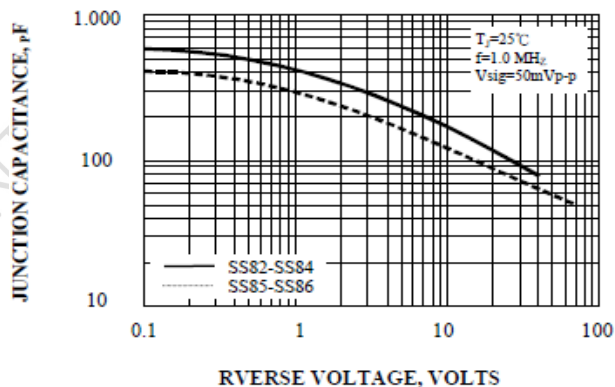
1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V

2. P.C.B. MOUNTED 0.55"x0.55 "(14x14 mm ) 0.013mm THICK COPPER PAD AREAS

3. MAXIMUM FORWARD VOLTAGE AT  $I_O$

PART NUMBER	MAX. RECURRENT PEAK REVERSE VOLTAGE $V_{RRM}$ (V)	MAX. RMS VOLTAGE $V_{RMS}$ (V)	MAX. DC BLOCKING VOLTAGE $V_{DC}$ (V)	MAX. FORWARD VOLTAGE $V_F$ (V)
SS82	20	14	20	0.55
SS83	30	21	30	0.55
SS84	40	28	40	0.55
SS85	50	35	50	0.70
SS86	60	42	60	0.70

## RATING AND CHARACTERISTIC CURVES

**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**
