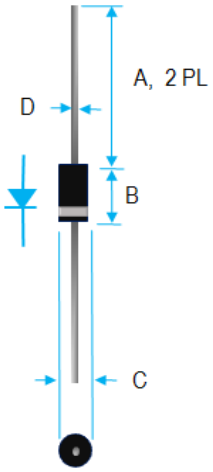
SR140 THRU SR1100 SPECIFICATION

Rev. A

1A SCHOTTKY BARRIER RECTIFIERS



Dim.	Value Inch[mm] Min.	Max.
A	1.000[25.40]	---
B	0.166[4.22]	0.205[5.21]
C	0.080[2.03]	0.107[2.72]
D	0.028[0.71]	0.034[0.86]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXTREMELY LOW V_F
3. LOW STORED CHARGE
4. MAJORITY CARRIER CONDUCTION
5. LOW POWER LOSS/HIGH EFFICIENCY
6. CASE: TRANSFER MOLDED, DO-41
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
9. WEIGHT: 0.34 GRAMS
10. RoHS COMPLIANT

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS (T_A =25°C UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL		UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT, SEE FIG.1	I_O	1.0	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	30	A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	110	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R\theta jA$	50	°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO +150	°C
OPERATING TEMPERATURE RANGE (NOTE 4)	T_{OP}	- 55 TO +125	°C
MAXIMUM REVERSE CURRENT AT 25°C	I_R	0.5	mA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	10	mA

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	MAXIMUM FORWARD VOLTAGE @ I_O DC, V_F(V)
SR140	40	28	0.55
SR160	60	42	0.70
SR1100	100	70	0.85

NOTE：
1. MEASURED AT 1MHz WITH APPLIED REVERSE VOLTAGE OF 4V.
2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1T (mm) COPPER PLATE AT LEAD LENGTH 5mm.
3. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.
4. SR160 AND SR1100 OPERATING TEMPERATURE CAN GO UP TO +150°C.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

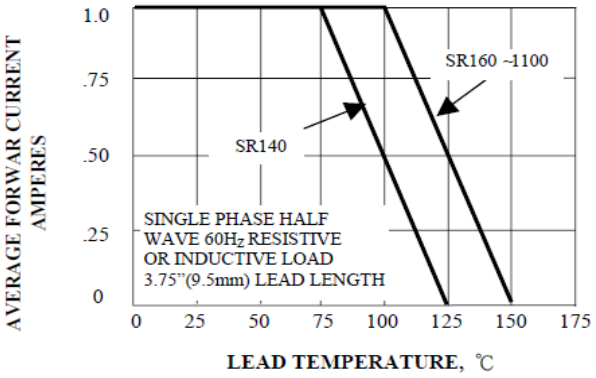


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

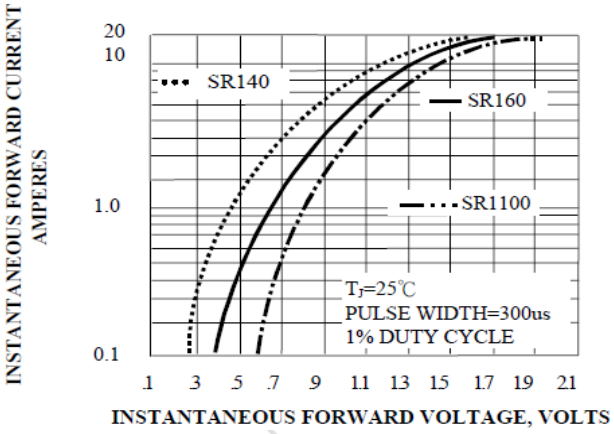


FIG. 3A - TYPICAL REVERSE CHRACTERISTICS

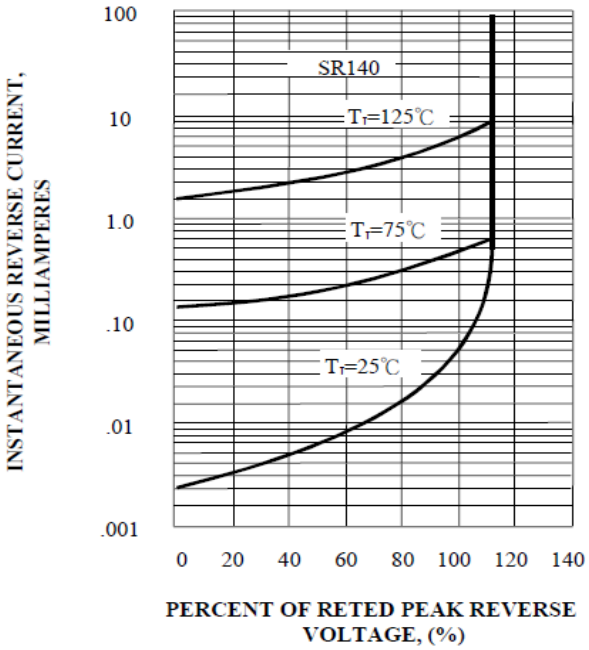


FIG. 3B - TYPICAL REVERSE CHARACTEISTICS

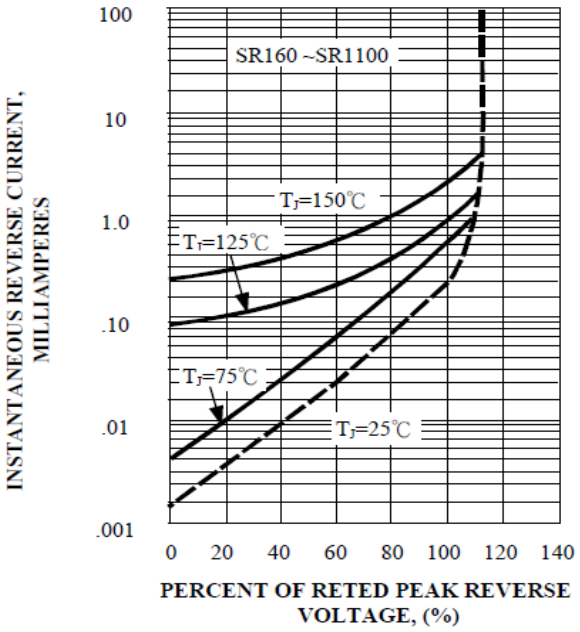


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

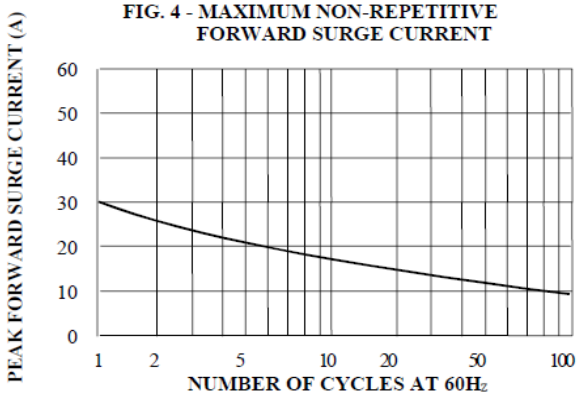


FIG. 5 - TYPICAL JUNCTION CAPACITANCE