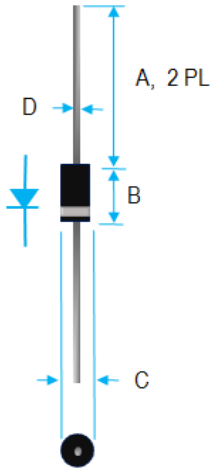


## 1A SCHOTTKY BARRIER RECTIFIERS

	<b>Value Inch[mm]</b>	
	Dim.	Min.
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 ( $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

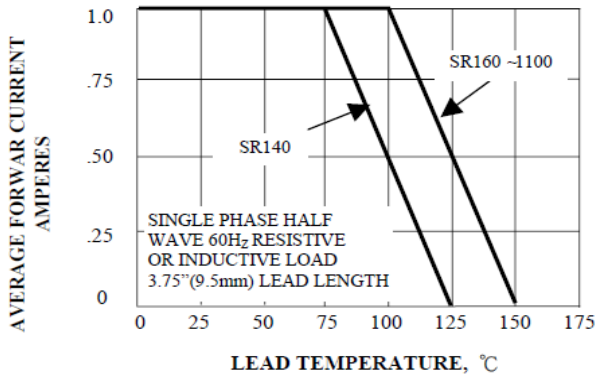
RATING	SYMBOL		UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT, SEE FIG.1	$I_o$	1.0	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	30	A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	110	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JA}$	50	$^\circ\text{C}/\text{W}$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

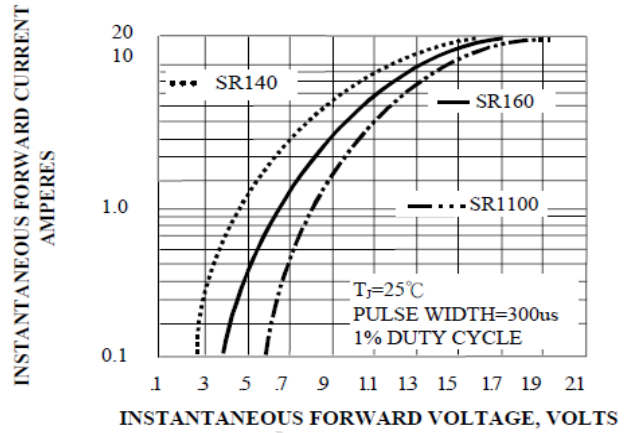
- NOTE :
1. MEASURED AT 1MHz WITH APPLIED REVERSE VOLTAGE OF 4V.
  2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1T (mm) COPPER PLATE AT LEAD LENGTH 5mm.
  3. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.
  4. SR160 AND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

## RATINGS AND CHARACTERISTIC CURVES

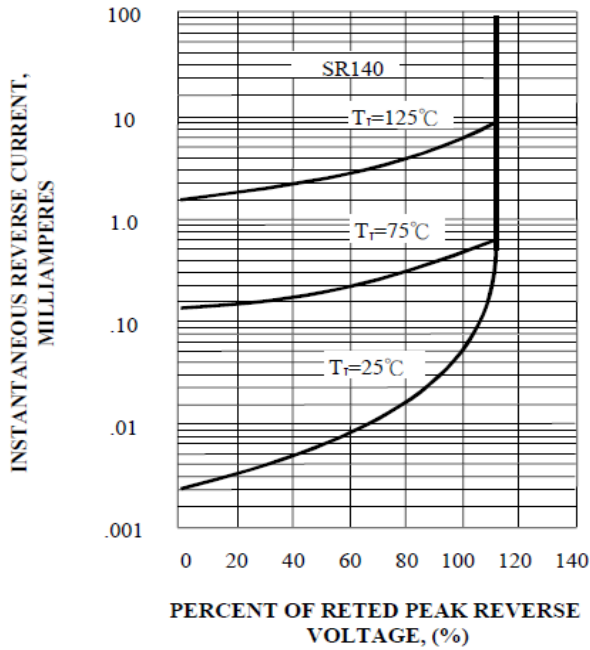
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



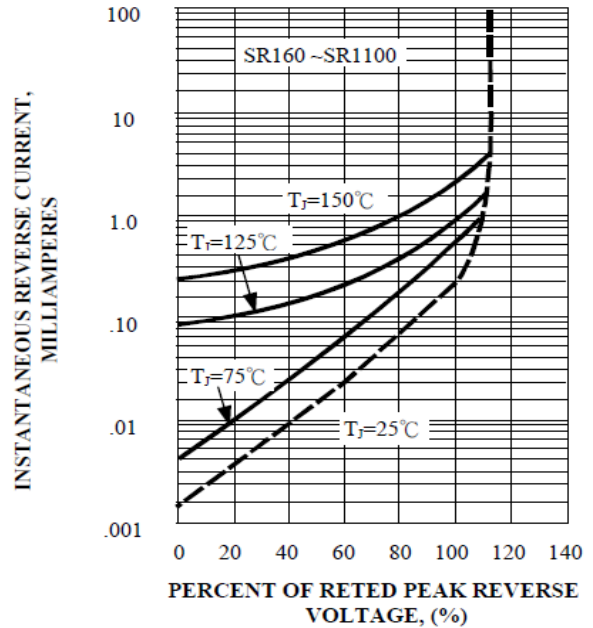
**FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



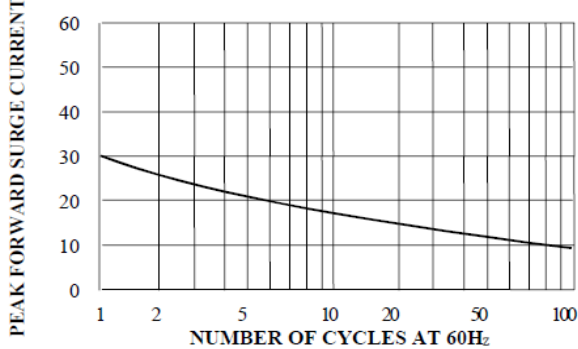
**FIG. 3A - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3B - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

