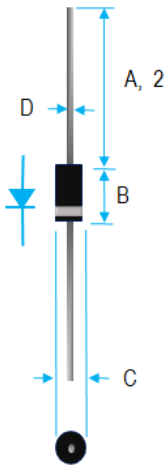


## 1A SCHOTTKY BARRIER RECTIFIERS

 <table border="1" data-bbox="357 399 698 609"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Value Inch[mm]</th> </tr> <tr> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1.000[25.40]</td> <td>---</td> </tr> <tr> <td>B</td> <td>0.166[4.22]</td> <td>0.205[5.21]</td> </tr> <tr> <td>C</td> <td>0.080[2.03]</td> <td>0.107[2.72]</td> </tr> <tr> <td>D</td> <td>0.028[0.71]</td> <td>0.034[0.86]</td> </tr> </tbody> </table>	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]	<h3>PRODUCT FEATURES</h3> <ol style="list-style-type: none"> <li>1. FLAMMABILITY CLASSIFICATION: 94V-0</li> <li>2. EXTREMELY LOW VF</li> <li>3. LOW POWER LOSS/HIGH EFFICIENCY</li> <li>4. LOW STORED CHARGE</li> <li>5. MAJORITY CARRIER CONDUCTION</li> <li>6. CASE: TRANSFER MOLDED DO-41</li> <li>7. DIMENSIONS IN INCHES AND (MILLIMETERS)</li> <li>8. POLARITY: INDICATED BY CATHODE BAND</li> <li>9. WEIGHT: 0.34 GRAMS</li> <li>10. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208</li> <li>11. RoHS</li> </ol>
Dim.		Value Inch[mm]																
	Min.	Max.																
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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, 0.375"(9.5mm) LEAD LENGTH (SEE FIG.1)	$I_O$	1.0	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	25	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	$C_J$	110	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	50	°C/W
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	500	uA
MAXIMUM REVERSE CURRENT AT 100°C	$I_R$	10,000	uA

1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1T (mm) COPPER PLATE AT LEAD LENGTH 5mm
3. MAXIMUM FORWARD VOLTAGE AT  $I_O$  DC

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)
1N5817	20	14	20	0.45
1N5818	30	21	30	0.55
1N5819	40	28	40	0.60

## RATING AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

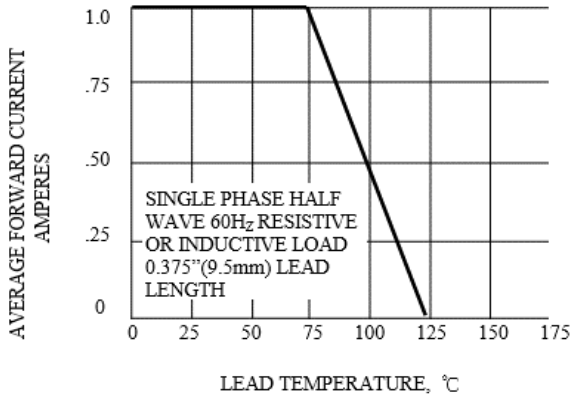


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

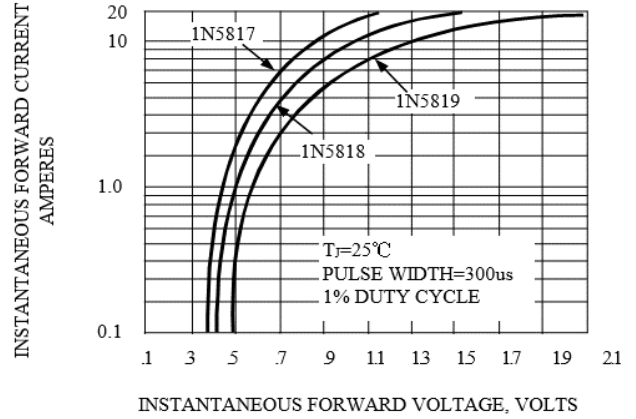


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

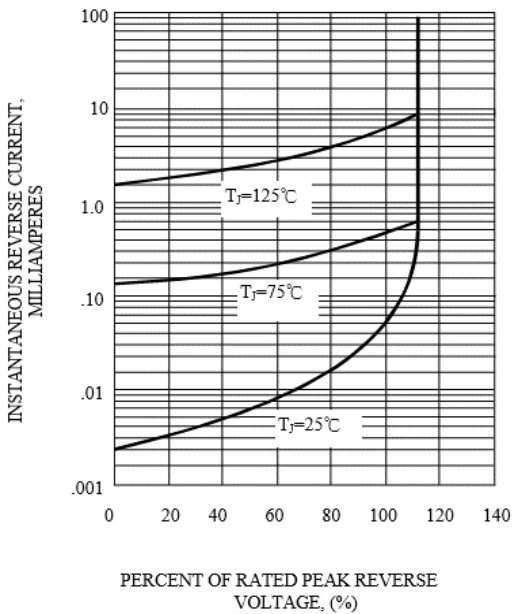
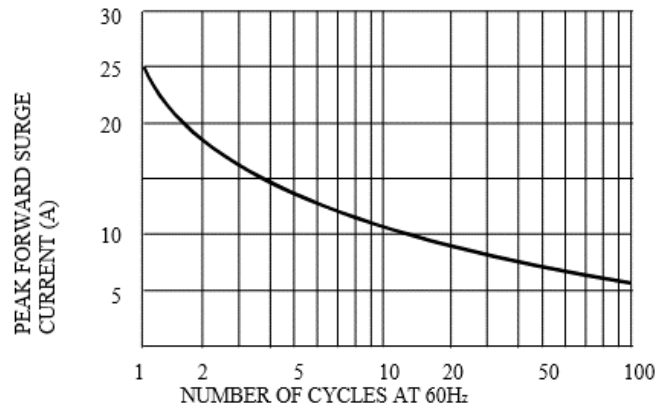


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

