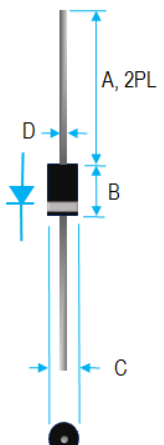


## 1A SCHOTTKY BARRIER RECTIFIERS

 <table border="1" style="margin-left: auto; margin-right: auto;"> <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>0.335[8.51]</td> <td>0.375[9.52]</td> </tr> <tr> <td>C</td> <td>0.197[5.00]</td> <td>0.220[5.59]</td> </tr> <tr> <td>D</td> <td>0.048[1.22]</td> <td>0.052[1.32]</td> </tr> </tbody> </table>	Dim.	Value Inch[mm]		Min.	Max.	A	1.000[25.40]	---	B	0.335[8.51]	0.375[9.52]	C	0.197[5.00]	0.220[5.59]	D	0.048[1.22]	0.052[1.32]	<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: MOLDED PLASTIC, DO-201AD</li> <li>7. DIMENSIONS IN INCHES AND (MILLIMETERS)</li> <li>8. POLARITY: INDICATED BY CATHODE BAND</li> <li>9. WEIGHT: 1.1 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)	$I_O$	3.0	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	80	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	$C_J$	250	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	30	°C/W
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	500	uA
MAXIMUM REVERSE CURRENT AT 100°C	$I_R$	20000	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)
1N5820	20	14	20	0.475
1N5821	30	21	30	0.500
1N5822	40	28	40	0.525



## RATING AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

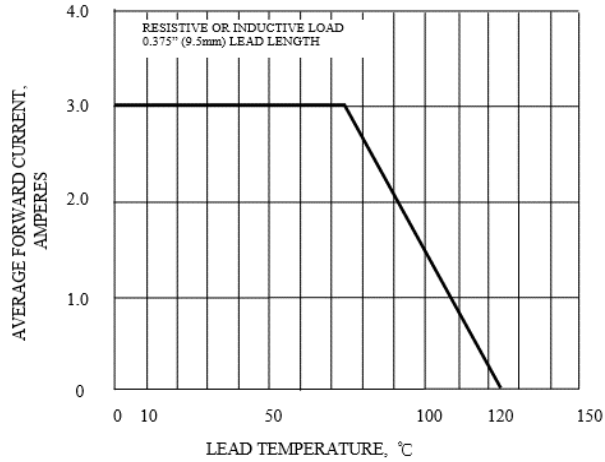


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

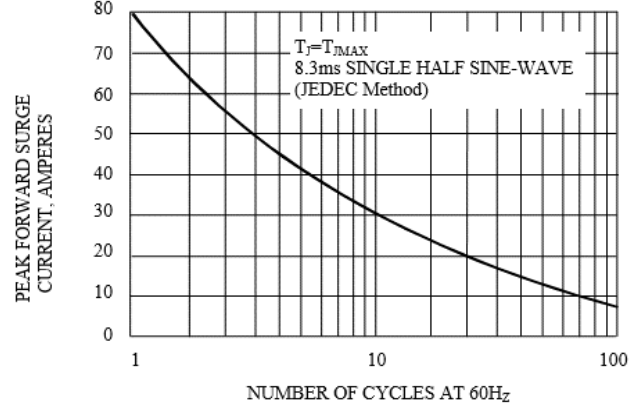


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

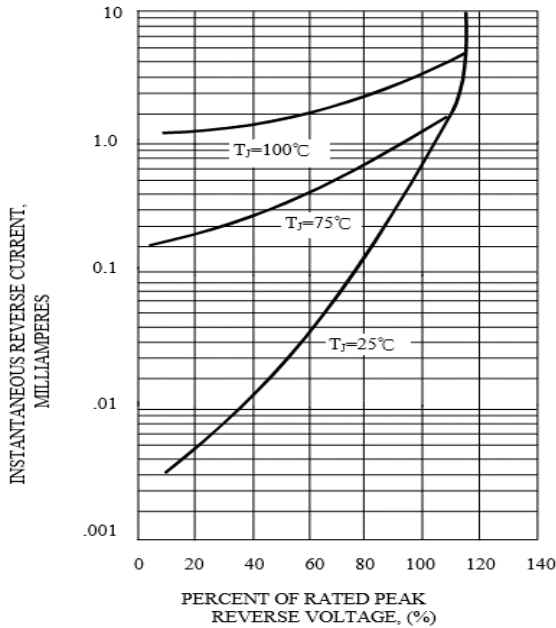


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

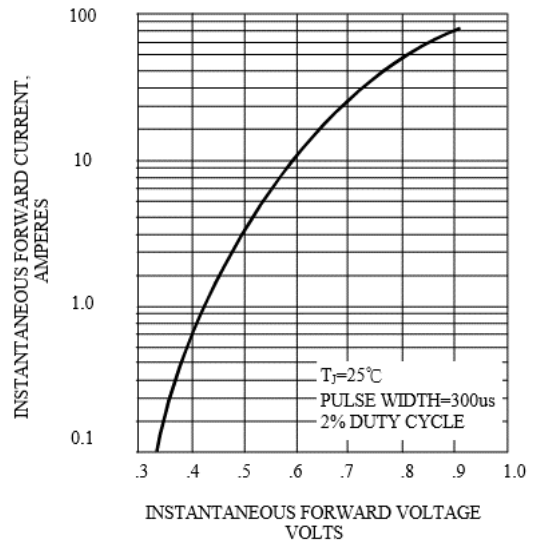


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

