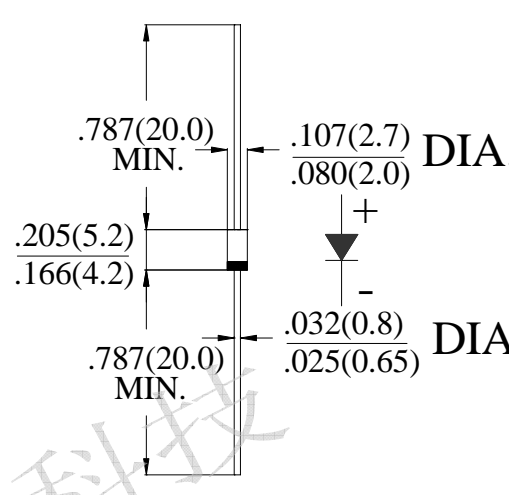


## RFC2K THRU RFC4K

### 0.2AMPS. HIGH VOLTAGE FAST RECOVERY RECTIFIERS

<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Fast switching</li> <li>• Low leakage</li> <li>• Low forward voltage drop</li> <li>• High current capability</li> <li>• High surge capability</li> <li>• High reliability</li> <li>• High voltage</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Case: Molded plastic</li> <li>• Epoxy: UL94V-0 rate flame retardant</li> <li>• Lead: MIL-STD- 202E, Method 208 guaranteed</li> <li>• Polarity: Color band denotes cathode end</li> <li>• Mounting position: Any</li> <li>• Weight: 0.33 grams</li> </ul>	<p style="text-align: center;"><b>DO-41</b></p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>				
<b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b>					
<p>Ratings at 25 ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.</p>					
<b>Type Number</b>	<b>SYMBOL</b>	<b>RFC2K</b>	<b>RFC3K</b>	<b>RFC4K</b>	<b>units</b>
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	2000	2400	3000	V
Maximum RMS Voltage	$V_{RMS}$	1400	1680	2100	V
Maximum DC Blocking Voltage	$V_{DC}$	2000	2400	3000	V
Maximum Average Forward rectified Current at $T_A=50^{\circ}C$	$I_{F(AV)}$	0.2			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	30			A
Maximum Instantaneous forward Voltage at 0.2A DC	$V_F$	4.0	5.0	6.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^{\circ}C$	$I_R$	5.0			μA
Maximum Full Load Reverse Current Average Full Cycle .375" (9.5mm) lead length at $T_L=55^{\circ}C$	$I_R$	100			
Maximum Reverse Recovery Time (Note )	$T_{RR}$	500			nS
Storage Temperature	$T_{STG}$	-55 to +150			°C
Operation Junction Temperature	$T_J$	-55 to +125			°C
<p><b>Note:</b> Test Conditions: <math>I_F=0.5A</math>, <math>I_R=1.0A</math>, <math>I_{RR}=0.25A</math></p>					

**RATING AND CHARACTERISTIC CURVES (RFC2K THRU RFC4K)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

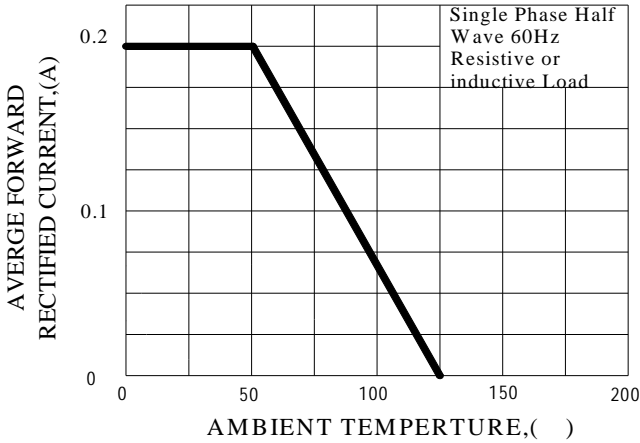


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

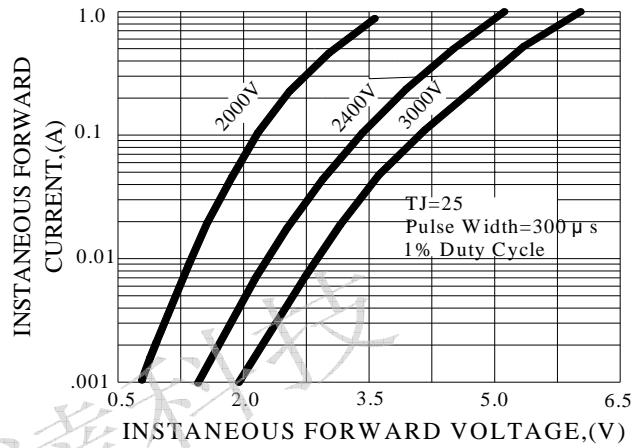


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

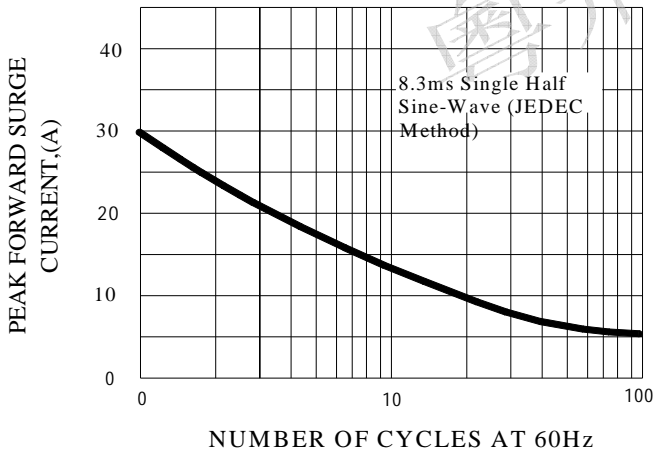


FIG.4-TYPICAL REVERSE CHARACTERISTICS

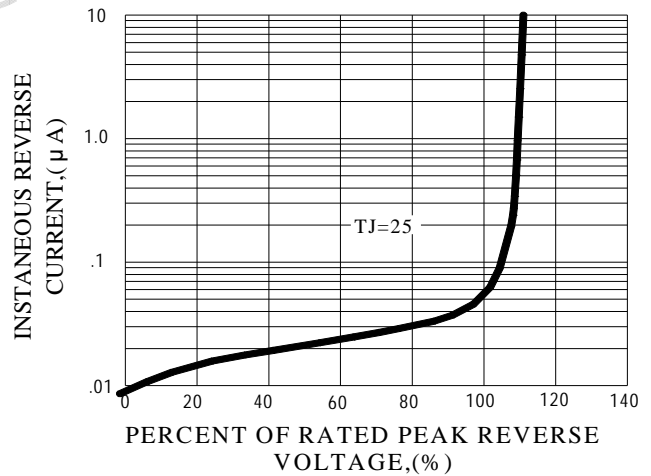


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

