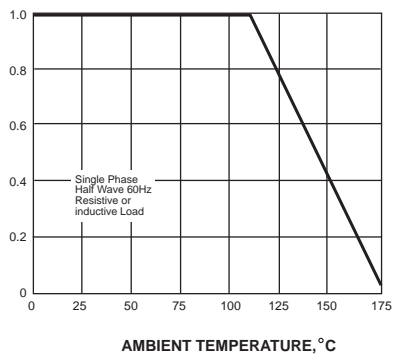


SMAF		FEATURES							
<p style="text-align: center;"><i>Dimensions in inches and (millimeters)</i></p>		<ul style="list-style-type: none"> <li>◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0</li> <li>◆ For surface mounted applications</li> <li>◆ Low reverse leakage</li> <li>◆ Built-in strain relief, ideal for automated placement</li> <li>◆ High forward surge current capability</li> <li>◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals</li> <li>◆ Glass passivated chip junction</li> </ul>							
		MECHANICAL DATA							
		<p><b>Case:</b> JEDEC SMAF molded plastic body over passivated chip  <b>Terminals:</b> Solder plated, solderable per MIL-STD-750, Method 2026  <b>Polarity:</b> Color band denotes cathode end  <b>Mounting Position:</b> Any  <b>Weight:</b> 0.0018 ounce, 0.064 grams</p>							
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS									
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.									
Catalog Number	SYMBOLS	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=75^\circ C$	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.1							Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	$I_R$	5.0 50.0							$\mu A$
Typical junction capacitance (NOTE 1)	$C_J$	15.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150							$^\circ C$
<p><b>Note:</b> 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.                  2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas</p>									

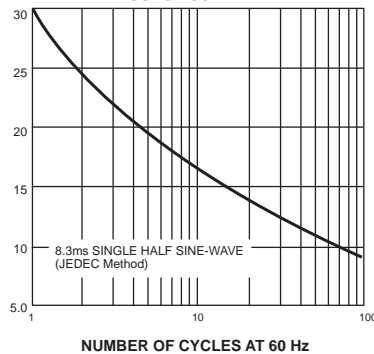
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



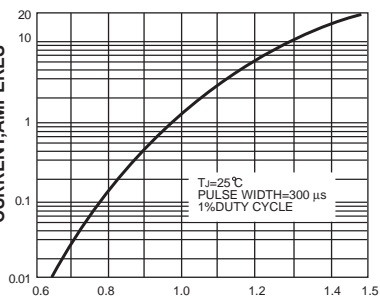
PEAK FORWARD SURGE CURRENT,  
AMPERES

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



INSTANTANEOUS FORWARD CURRENT, AMPERES

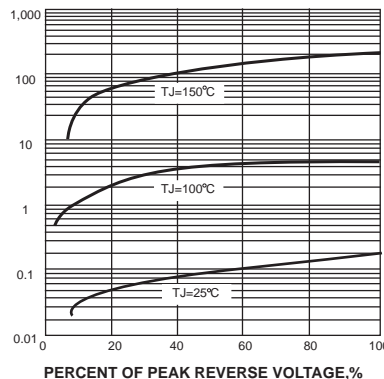
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE,  
VOLTS

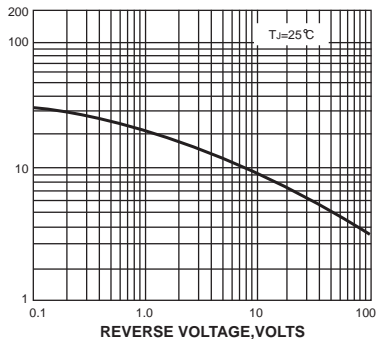
INSTANTANEOUS REVERSE CURRENT,  
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

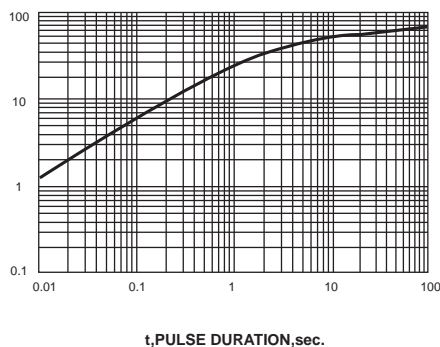
FIG. 5-TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS

TRANSIENT THERMAL IMPEDANCE,  
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t, PULSE DURATION, sec.