1.0Amp Silicon Rectifiers

FEATURES：

- Glass passivated chip junctions
- Low forward voltage drop.
- High temperature soldering 260°C/10 seconds at terminals
- High forward surge capability
- RoHS compliant.

MECHANICAL DATA：

- Case：DO-41,Molded plastic body
- Terminals：Axial leads, solderable per MIL-STD-202, Method 208
- Polarity：Color band denotes cathode end

MAXIMUM RATINGS (Ratings at 25 ℃ ambient temperature unless otherwise specified)

Characteristic	Symbol	IN4001	IN4002	IN4003	IN4004	IN4005	IN4006	IN4007	Unit
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectifier Forward Current	$I_{(AV)}$	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage (T_A=25℃ / T_A=100℃)	I_R	5.0 / 50							uA
Typical Junction Capacitance (1)	C_J	15							pF
Typical Thermal resistance (2)	$R_{\theta JA}$	50							℃/W
Operating Junction temperature	T_J	-55 to +150							℃
Storage temperature range	T_{STG}	-55 to +150							℃

Note : 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C
2.Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted

RATINGS AND CHARACTERISTICS CURVES

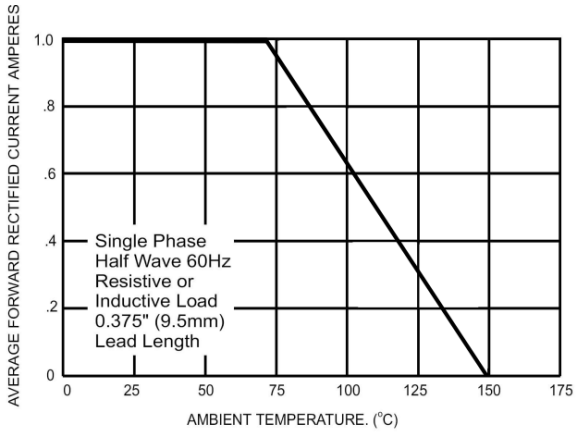


Figure 1. MAXIMUM FORWARD CURRENT DERATING CURVE

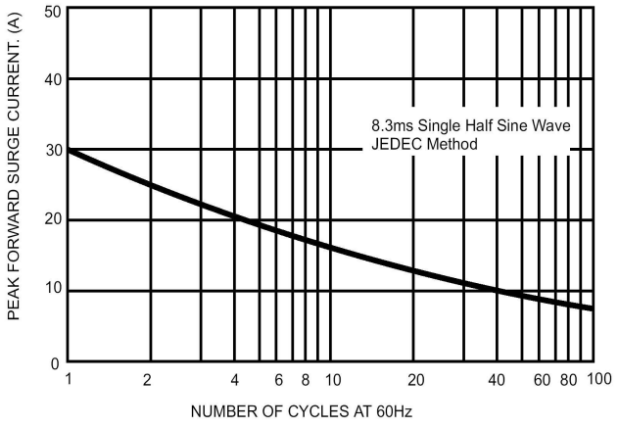


Figure 2. MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

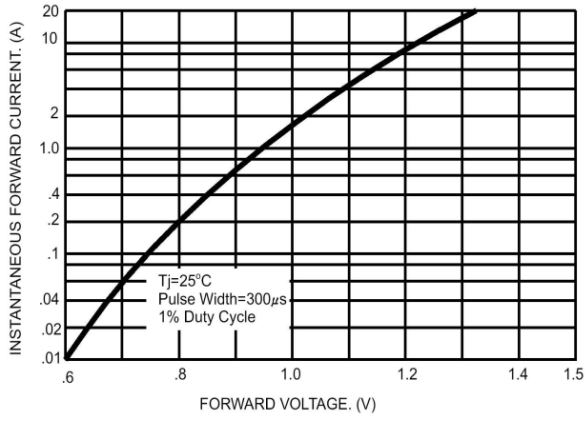


Figure 3. TYPICAL FORWARD CHARACTERISTICS

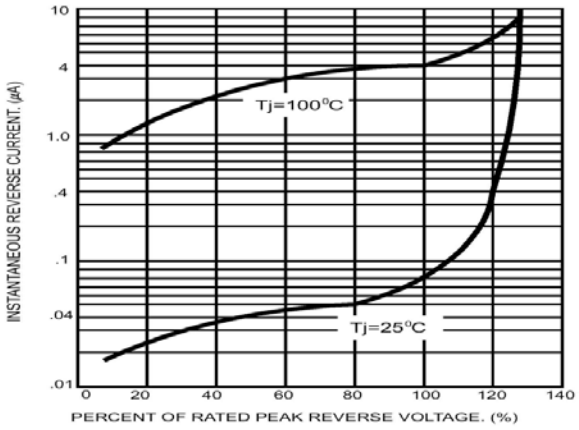


Figure 4. TYPICAL REVERSE LEAKAGE CHARACTERISTICS

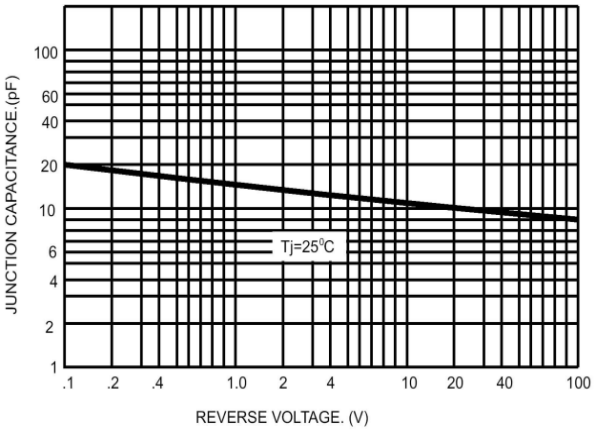
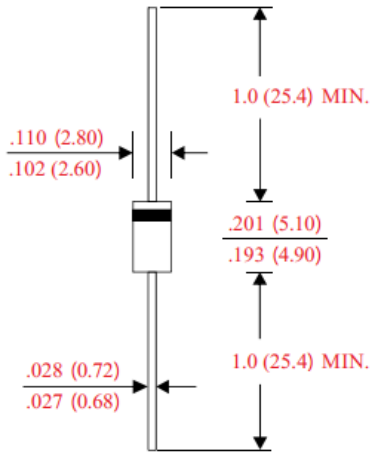


Figure 5. TYPICAL JUNCTION CAPACITANCE

• DO-41 Package outlines : Dimensions in inches (millimeters)



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