

**FAST RECOVERY RECTIFIERS  
GLASS PASSIVATION JUNCTION**

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 1.0 Amperes

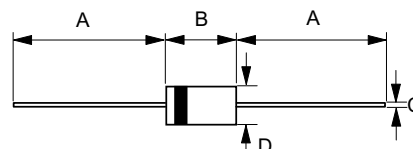
**FEATURES**

- Fast switching for high efficiency
- Low cost
- Glass passivation junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

**MECHANICAL DATA**

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

**DO-41**



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.20	5.20
C	0.70 $\phi$	0.90 $\phi$
D	2.00 $\phi$	2.70 $\phi$
All Dimensions in millimeter		

**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, derate current by 20%

PARAMETER	SYMBOL	PR 1001G	PR 1002G	PR 1003G	PR 1004G	PR 1005G	PR 1006G	PR 1007G	UNIT
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F</sub>	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30.0							A
Maximum instantaneous I <sub>F</sub> =1A@25	V <sub>F</sub>	1.30							V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	I <sub>R</sub>	5 100							$\mu$ A
Maximum Reverse Recovery Time	T <sub>rr</sub>	150			250	500		nS	
Typical Junction Capacitance	C <sub>J</sub>	15							pF
Operating Temperature Range	T <sub>J</sub>	-55 to +150							
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

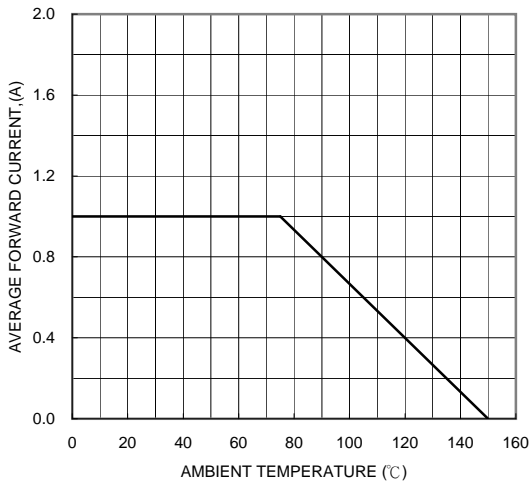


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

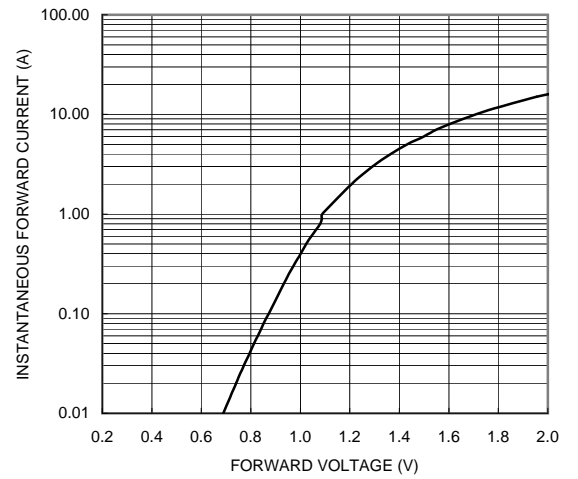


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

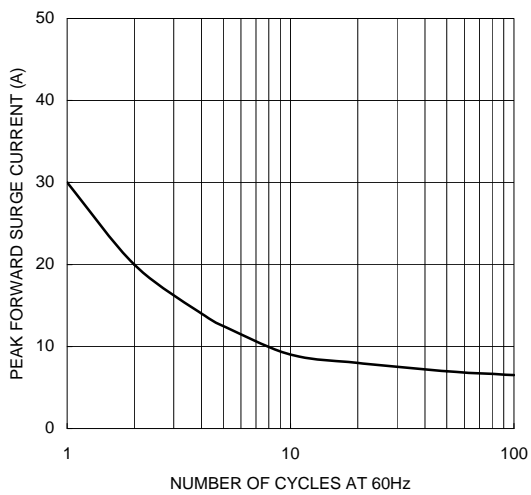


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

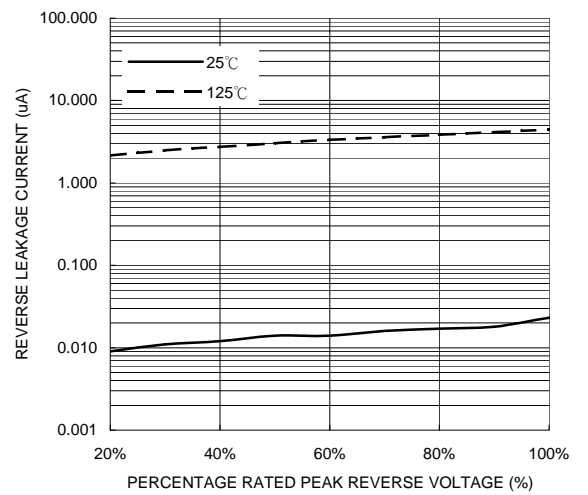


FIG. 5-TYPICAL JUNCTION CAPACITANCE

