

1 AMP SOFT GLASS PASSIVATED SILICON DIODES

FEATURES

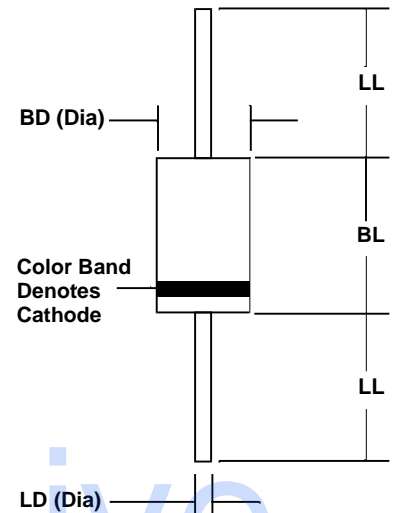
- Proprietary "Soft Glass[®]" P/N junction passivation
- Void-free chip soldering
- Extremely low leakage at high temperatures
- Ideal for continuous high temperature applications
- High surge current capability
- Low forward voltage drop
- 1A at TA = 75 °C with no thermal runaway

MECHANICAL SPECIFICATION

ACTUAL SIZE OF
DO-41 PACKAGE

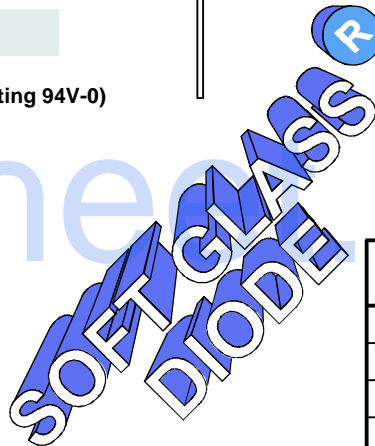
SERIES 1N4001G - 1N4007G

DO - 41



MECHANICAL DATA

- Case: JEDEC DO-41, molded plastic (U/L Flammability Rating 94V-0)
- Terminals: Plated axial leads
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.012 Ounces (0.34 Grams)



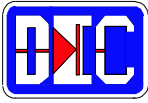
Sym	Minimum		Maximum	
	In	mm	In	mm
BL	0.160	4.1	0.205	5.2
BD	0.103	2.6	0.107	2.7
LL	1.00	25.4		
LD	0.028	0.71	0.034	0.86

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive loads, derate current by 20%.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS							UNITS
		1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	
Series Number									
Maximum DC Blocking Voltage	V _{RM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum Peak Recurrent Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	
Average Forward Rectified Current @ TA = 75 °C (Lead length = 0.375 in. (9.5 mm))	I _o	1							AMPS
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load)	I _{FSM}	50							
Maximum Forward Voltage at 1 Amp DC	V _{FM}	1							VOLTS
Maximum Full Cycle Reverse Current @ TL = 75 °C (Note 1)	I _{RM(AV)}	10							μA
Maximum Average DC Reverse Current At Rated DC Blocking Voltage	I _{RM}	1 20							
Typical Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	30							°C/W
Typical Junction Capacitance (Note 2)	C _J	10							pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

NOTES: (1) Lead length = 0.375 in. (9.5 mm)
 (2) Measured at 1MHz & applied reverse voltage of 4 volts



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RATING & CHARACTERISTIC CURVES FOR SERIES 1N4001G - 1N4007G

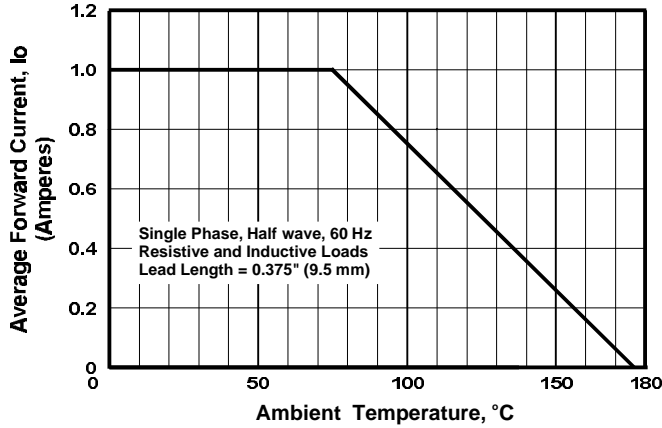


FIGURE 1. FORWARD CURRENT DERATING CURVE

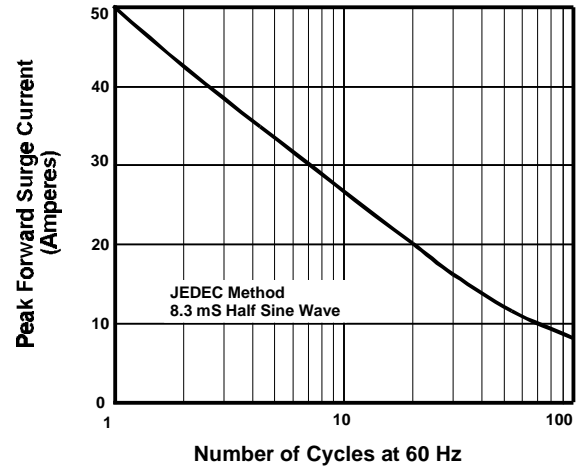


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

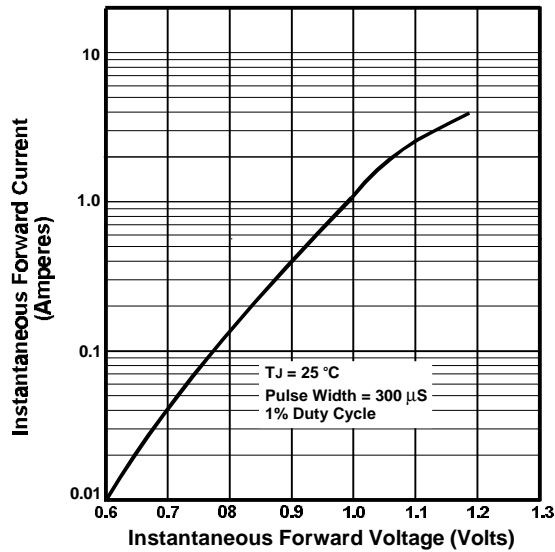


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE

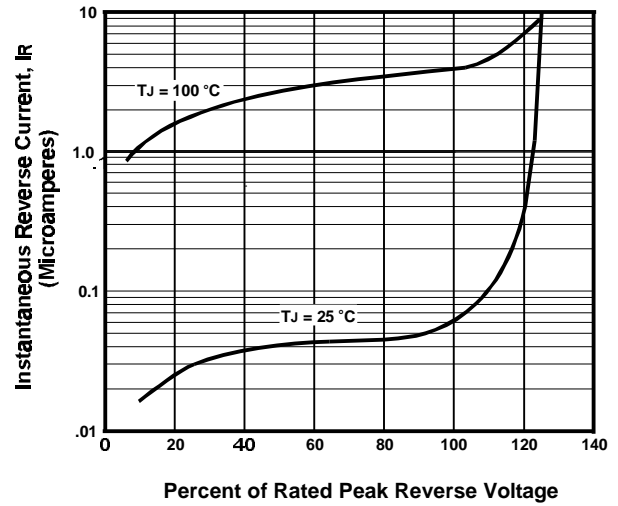


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

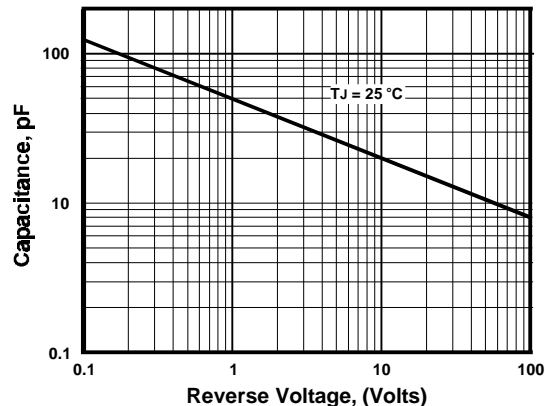


FIGURE 5. TYPICAL JUNCTION CAPACITANCE PER DIODE

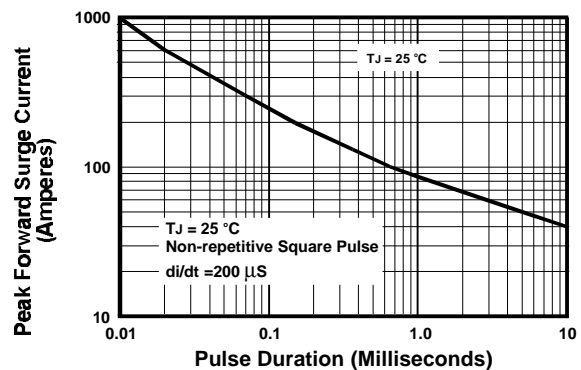


FIGURE 6. PEAK FORWARD SURGE CURRENT