

## 1N492G thru 1N498G

### Glass Passivated Junction Fast Recovery Rectifiers

Reverse Voltage 200 to 1000V  
Forward Current 1.0A

### 1.Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* Cavity-free glass passivated junction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 1.0 A operation at  $T_A=75^\circ\text{C}$  with no thermal runaway
- \* For use in high frequency rectifier circuits
- \* Fast switching for high efficiency
- \* Typical IR less than  $1.0\mu\text{A}$
- \* High temperature soldering guaranteed:  
260°C/10 seconds
- \* 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### 2.Mechanical Data

**Case:** JEDEC DO-41, molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.012 oz., 0.34 g  
**Handling precaution:** None

### 3.Electrical Characteristic

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

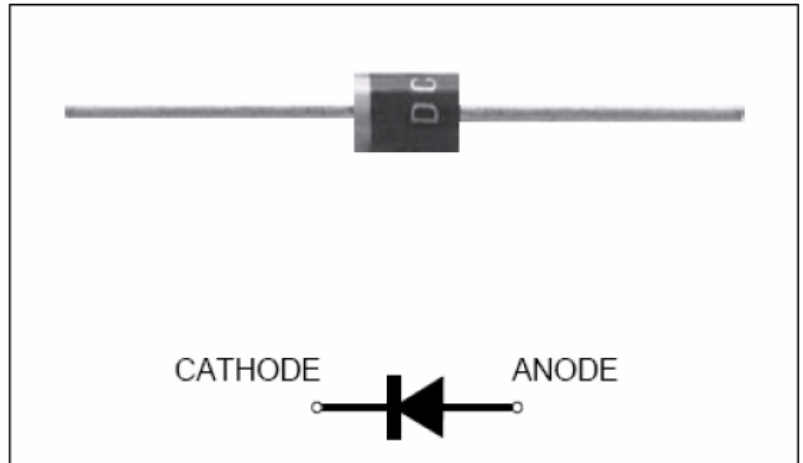
Parameter Symbol	symbol	1N49 42G	1N49 44G	1N49 46G	1N49 47G	1N49 48G	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 75^\circ\text{C}$	$I_F(AV)$	1.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25					A
Typical thermal resistance (Note 2)	$R_{\theta JA}$	50					°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150					°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N49 42G	1N49 44G	1N49 46G	1N49 47G	1N49 48G	Unit
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.3					V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	IR	5.0 100					$\mu\text{A}$
Typical reverse recovery time (Note 1)	$t_{rr}$	150	250	500			ns
Typical junction capacitance at 4.0V, 1MHz	$C_J$	15					PF

NOTES:

1.  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



We declare that the material of product  
compliance with RoHS requirements.

### 4. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

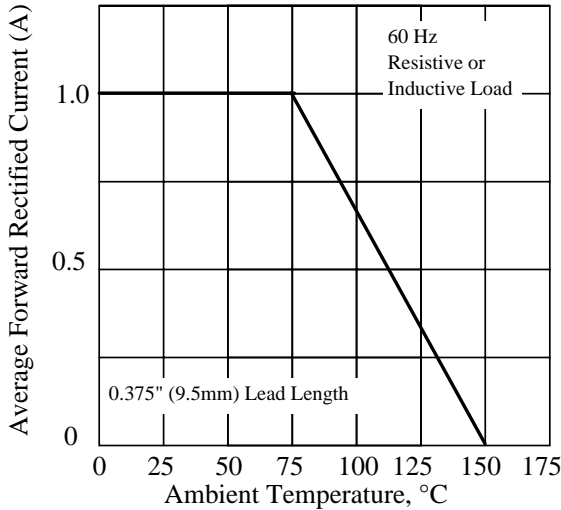


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

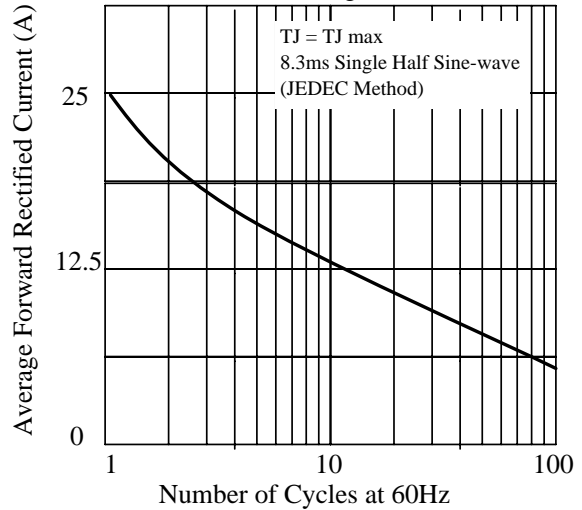


Fig. 3 - Typical Instantaneous Forward Characteristics

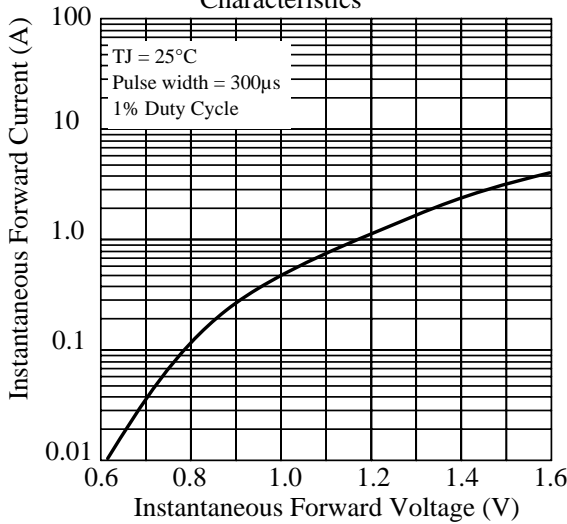


Fig. 4 - Typical Reverse Characteristics

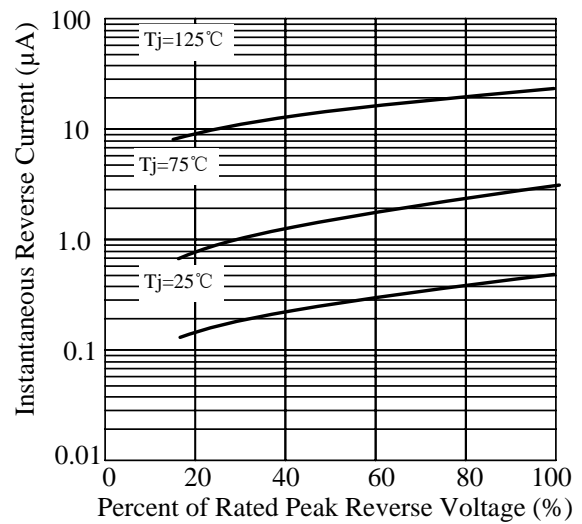


Fig. 5 - typical transient thermal impedance

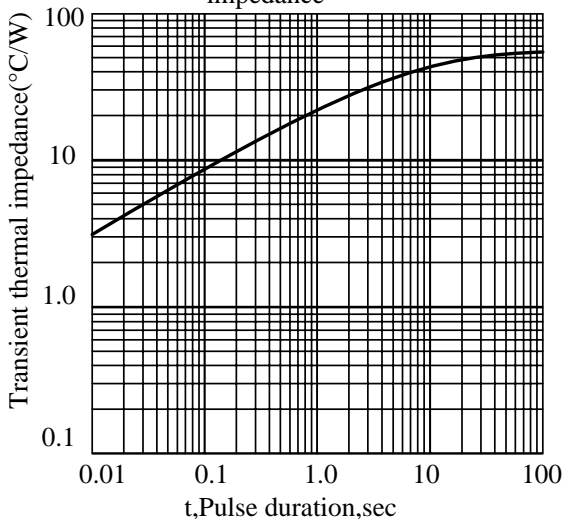
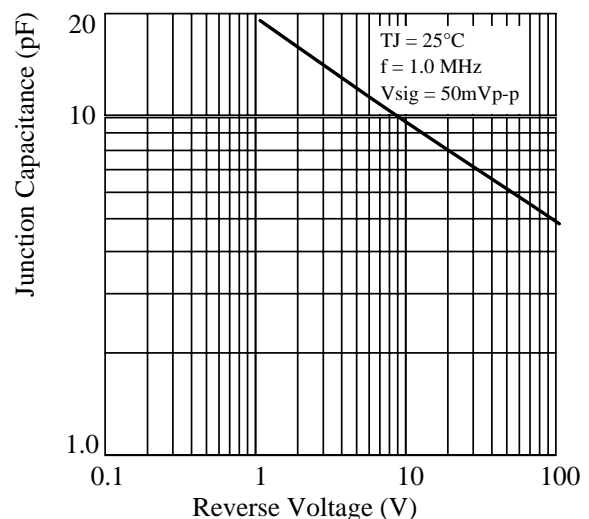
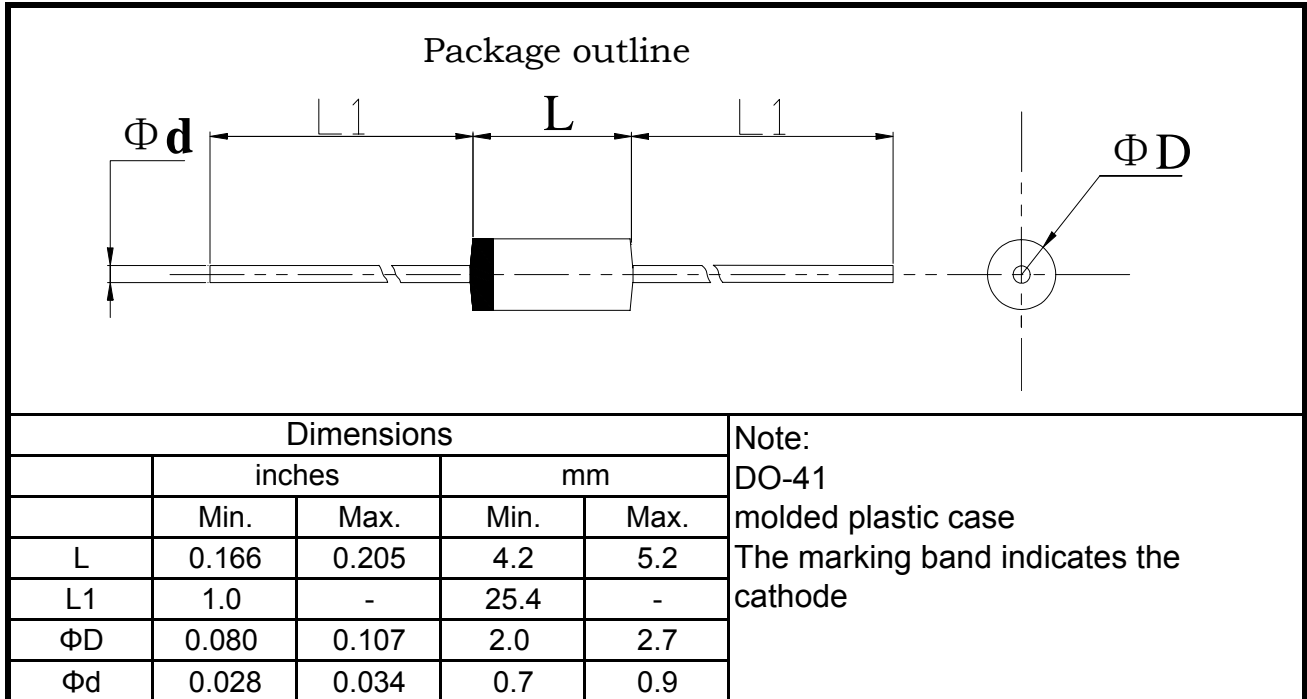


Fig. 6 - Typical Junction Capacitance



**5.Package Dimensions in inches and (millimeters)**


单击下面可查看定价，库存，交付和生命周期等信息

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