

4855452 INTERNATIONAL RECTIFIER

55C 04900 D

Data Sheet No. PD-2.003C *T-01-11*

INTERNATIONAL RECTIFIER 

1N2069, A SERIES

750 mA Silicon Rectifier Diodes

Major Ratings and Characteristics

	1N2069	1N2069A	Units
$I_F(AV)$	750*	750*	mA
@ Max. T_A	25*	25*	°C
I_{FSM}	50 Hz	21	A
	60 Hz	22*	A
$I^2\sqrt{t}$	31.2	31.2	A ² √s
$I_R(AV)$	200*	50*	mA
T_J range	-30 to 100*		°C
V_{RRM} range	200 to 600*		V

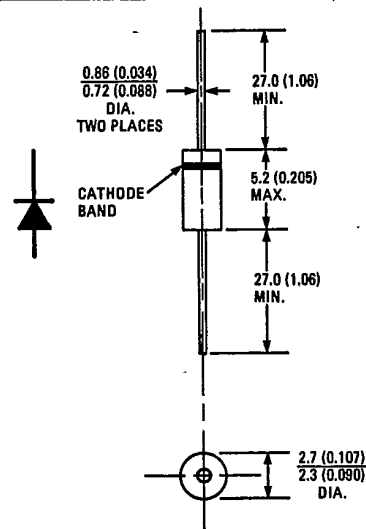
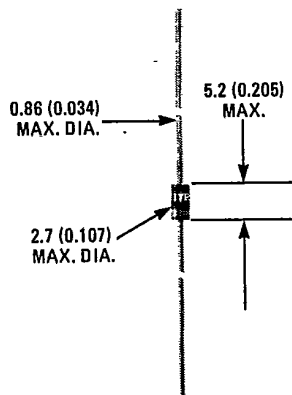
Description/Features

- 2 series in molded case - 1N2069, 1N2069A
"A" version offers lower reverse current



*JEDEC registered value.

CASE STYLE AND DIMENSIONS



Case Style DO-204AL (DO-41)
All Dimensions in Millimeters and (Inches)

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VOLTAGE RATINGS

Part Numbers	V_{RRM} - Max. Repetitive Peak Reverse Voltage (V)	$V_{R(RMS)}$ - Max. RMS Reverse Voltage (V)	V_R - Max. DC Blocking Voltage (V)
1N2069, A	200*	140	200*
1N2070, A	400*	280	400*
1N2071, A	600*	420	600*

ELECTRICAL SPECIFICATIONS

	1N2069	1N2069A	Units	Conditions
$I_{F(AV)}$ Max. average forward current	750*	750*	mA	180° sinusoidal conduction @ $T_A = 25^\circ\text{C max.}^*$
I_{FSM} Max. peak one cycle, non-repetitive surge current	21	21	A	Half cycle 50 Hz sine wave or 6 ms rectangular pulse Following any rated load condition, and with rated V_{RRM} reapplied.
	22*	22*		
$I^2\sqrt{t}$ Max. $I^2\sqrt{t}$ for individual device fusing $\text{\textcircled{1}}$	31.2	31.2	$A^2\sqrt{s}$	$t = 0.1$ to 10 ms with V_{RRM} following surge = 0.
V_{FM} Max. peak forward voltage	1.2*	1.0*	V	$T_A = 25^\circ\text{C}$, $I_F = 0.5\text{A}$
$I_R(AV)$ Max. average reverse current	200*	50*	μA	$T_A = 100^\circ\text{C}$ $I_{F(AV)} = 0.75\text{A}$ $V_R = \text{Rated } V_{RRM}$

THERMAL-MECHANICAL SPECIFICATIONS

T_A Max. operating ambient temperature range	-30* to 100*	$^\circ\text{C}$	
T_{stg} Max. storage temperature range	-30* to 100*	$^\circ\text{C}$	
wt Approximate weight	0.35 (0.0125)	g (oz.)	
Case Style	DO-204AL (DO-41)		JEDEC

*JEDEC registered value.

 $\text{\textcircled{1}} I^2t$ for time $t_x = I^2\sqrt{t} \cdot \sqrt{t_x}$.

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1N2069,A Series

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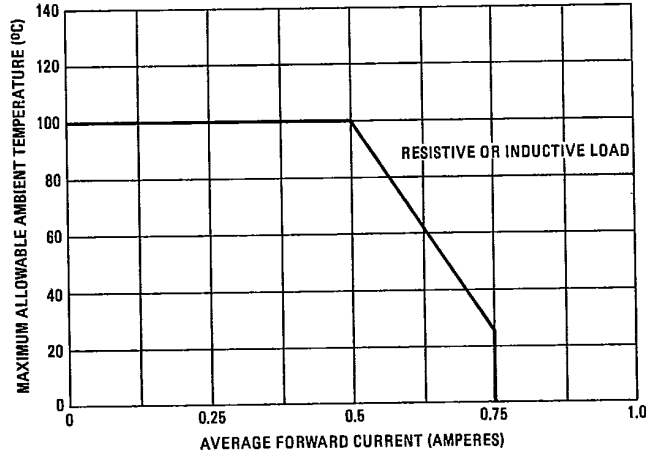


Fig. 1 - Average Forward Current Vs. Maximum Allowable Ambient Temperature

B

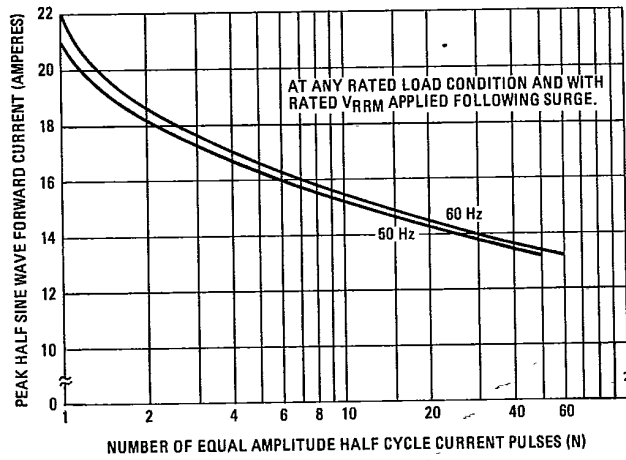


Fig. 2 - Maximum Non-Repetitive Surge Current Vs. Number of Current Pulses