

INTERNATIONAL RECTIFIER

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4855452 INTERNATIONAL RECTIFIER

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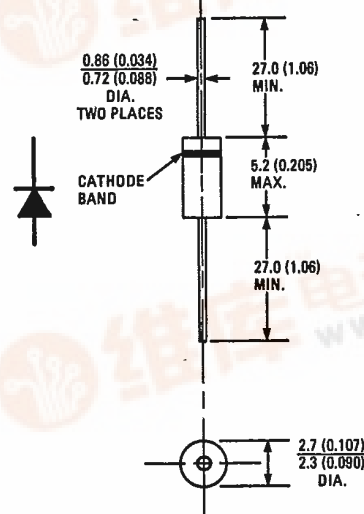
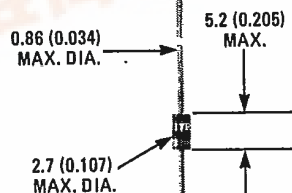
INTERNATIONAL RECTIFIER **1N2069, A SERIES****750 mA Silicon Rectifier Diodes****Major Ratings and Characteristics**

	1N2069	1N2069A	Units
$I_F(AV)$ @ Max. T_A	750*	750*	mA
T_J range	25*	25*	°C
I_{FSM}			
50 Hz	21	21	A
60 Hz	22*	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 DIMENSIONSCase Style DO-204AL (DO-41)
All Dimensions in Millimeters and (Inches)

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1N2069, A Series

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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 1N2070, A 1N2071, A	200* 400* 600*	140 280 420	200* 400* 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
	22*	22*		Half cycle 60 Hz sine wave or 5 ms rectangular pulse
$I^2\sqrt{t}$ Max. $I^2\sqrt{t}$ for individual device fusing ^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 = 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.

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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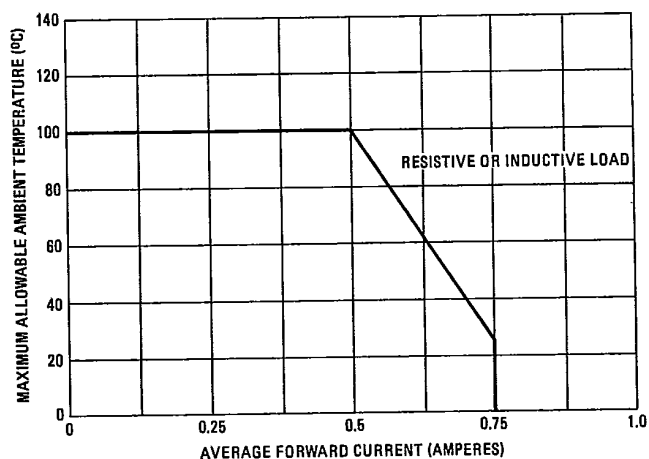


Fig. 1 — Average Forward Current Vs. Maximum Allowable Ambient Temperature

B

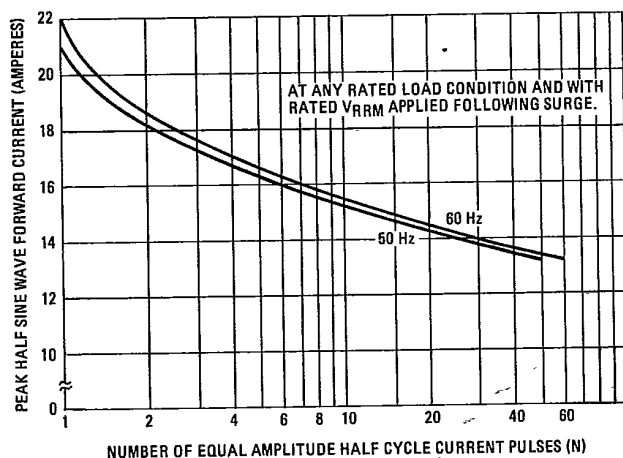


Fig. 2 — Maximum Non-Repetitive Surge Current Vs. Number of Current Pulses