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Jameco Part Number 36273 (1N5408)

1N5400 - 1N5408

Features

- 3.0 ampere operation at T_A = 75°C with no thermal runaway.
- High current capability.
- · Low leakage.



General Purpose Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value				Units					
		5400	5401	5402	5403	5404	5405	5406	5407	5408	
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current, .375 " lead length @ T _A = 75°C	3.0					Α				
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	200				А					
T _{stg}	Storage Temperature Range	-55 to +150				°C					
TJ	Operating Junction Temperature	-55 to +150					°C				

^{*}These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_{D}	Power Dissipation	6.25	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	20	°C/W

Electrical Characteristics $T_A = 25$ °C unless otherwise noted

Symbol	Parameter		Device								Units
			5401	5402	5403	5404	5405	5406	5407	5408	
V_{F}	Forward Voltage @ 3.0 A		1.2								V
Irr	Maximum Full Load Reverse Current, Full Cycle T _A = 105°C	0.5			mA						
I _R	Reverse Current @ rated V_R $T_A = 25^{\circ}C$ $T_{\Delta} = 100^{\circ}C$		5.0 500						μA μA		
C _T	Toatal Capacitance $V_R = 4.0 \text{ V}, f = 1.0 \text{ MHz}$	30			pF						

General Purpose Rectifiers

(continued)

Typical Characteristics

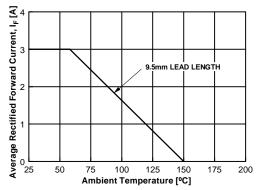


Figure 1. Forward Current Derating Curve

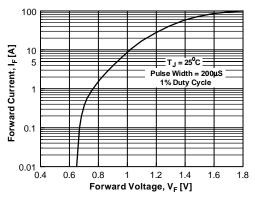


Figure 2. Forward Voltage Characteristics

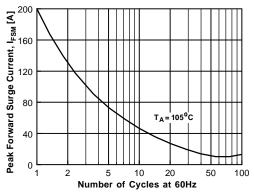


Figure 3. Non-Repetitive Surge Current

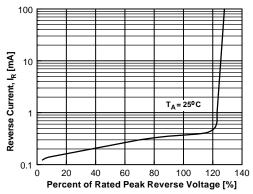


Figure 4. Reverse Current vs Reverse Voltage

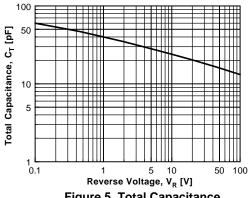


Figure 5. Total Capacitance

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