Standard Power Diode





Features

Low forward voltage drop

· High current capability

· High reliability

· High surge current capability

Mechanical Data

Cases : Moulded plastic DO-41

Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed

Polarity : Colour band denotes cathode end

High temperature soldering guaranteed : 260°C/10 seconds/0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension

Weight : 0.34g

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number	Symbol	Value	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	
Maximum DC Blocking Voltage	V_{DC}	600	
Maximum Average Forward Rectified	I _(AV)	1	А
Current 0.375" (9.5mm) Lead Length at T _A = 75°C			
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30	
Maximum Instantaneous Forward Voltage at 1A	V _F	1.2	V
Maximum DC Reverse Current at T _A = 25°C at Rated DC Blocking Voltage at T _A = 125°C	I _R	5 100	μA μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	200	nS
Typical Junction Capacitance (Note 2)	CJ	10	pF
Typical Thermal Resistance (Note 3)	$R_{ heta JA}$	65	°C/W
Operating Temperature Range	TJ	-65 to +175	°C
Storage Temperature Range	T _{STG}		

Note 1: Reverse Recovery Test Conditions: I_F = 1.0A, V_R = 30V, di/dt = 50A/ μ S, I_{rr} = 10% I_{RM} for Measurement of t_{rr} .

Note 2: Measured at 1MHz and Applied Reverse Voltage of 4V DC.

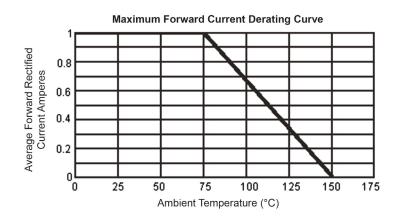
Note 3: Mount on Cu-Pad Size 5mm × 5mm on PCB.

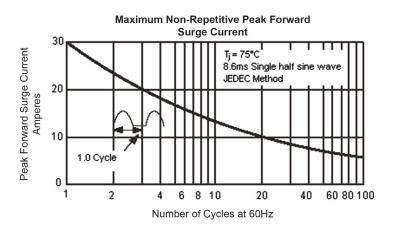
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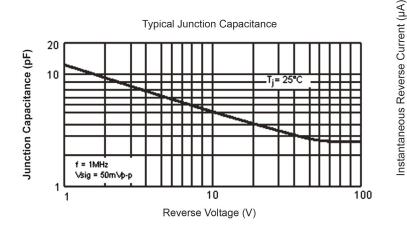


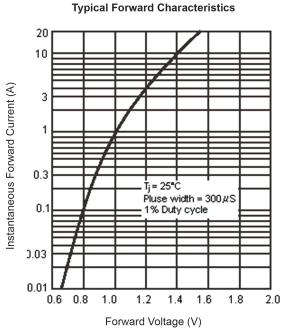
Standard Power Diode multicomp PRO

Ratings and Characteristic Curves

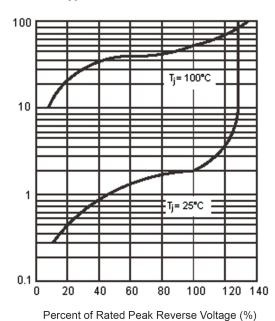












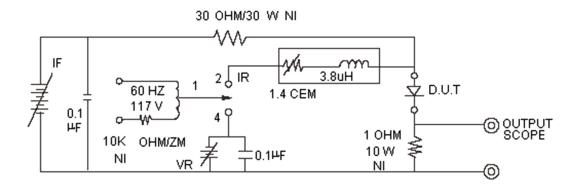
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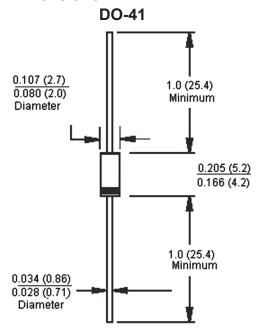
Standard Power Diode



Reverse Recovery Time Characteristic and Test Circuit Diagram



Dimensions:



Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number	
Standard Power Diode, 1A, 600V	1N4937G+	

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