# GP1010

IATE16949社 词

Anode2

◦ Anode1

Anode2

Anode1



## GENERAL PURPOSE PLASTIC RECTIFIER Reverse Voltage - 1000 Volts Forward Current -10.0Amperes

REACH

JF wmys

GP1010

Cathode • 🖊

W-Work week M-Work month Y-Work year

S-Assembly loacation

GP1010-Device Type

MARKING: JF-Logo

Cathode

## FEATURES

- The plastic package carries Underwrites Laboratory
- Flammability Classification 94V-0
- High forward current capability
- High surge current capabilit y
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

# MECHANICAL DATA

- · Case:TO-277 molded plastic body
- Terminals: Plated axial lead, solderable per MIL-STD-750,method 2026
- · Polarity: Color band denotes cathode end
- · Mounting Position: Any

## TYPICAL APPLICATIONS

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes application.

### MAXIMUM RATINGS

(Ratings at 25℃ ambient temperature unless otherwise specified )

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Parameter		Symbol	Value	Unit	
Maximum recurrent peak reverse voltage		V <sub>RRM</sub>	1000	Volts	
Maximum RMS voltage		V <sub>RMS</sub>	700	Volts	
Maximum DC blocking voltage		V <sub>DC</sub>	1000	Volts	
Maximum average forward rectified current		I(AV)	10.0	Amps	
Peak forward surge current (8.3ms half sine- wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	200	Amps	
Maximum instantaneous forward voltage at 10.0 A		V <sub>F</sub>	1.1	Volts	
Maximum reverse	T,=25℃		5.0		
current at rated DC blocking voltage	T,=125℃	I <sub>R</sub>	100	μΑ	
Typical junction capacitance (Note 1)		C,	53	pF	
Typical thermal Junction resistance (Note 2) Junction	n-Ambient n-Lead	R <sub>eja</sub> R <sub>ejl</sub>	60.0 3.0	°C/W	
Operating and Storage temperature range		T <sub>J</sub> /T <sub>stg</sub>	-55 to+150	°C	

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D C .

2.Mounted on recommended PCB 1 oz. Pad layout



# RATINGS AND CHARACTERISTIC CURVES GP1010

#### FIG.1-FORWARD CURRENT DERATING CURVE



#### FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



#### FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS





# PACKAGE OUTLINE DIMENSIONS



Suggested Pad

TO-277 foot print



А	В	С	D	E	F	G
0.185 (4.70)	0.142 (3.60)	0.152 (3.87)	0.260 (6.60)	0.055 (1.40)	0.035 (0.90)	0.031 (0.80)

Dimensions in inches and (millimeters)



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