

GP10A THRU GP10M



1.0 AMP SILICON RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

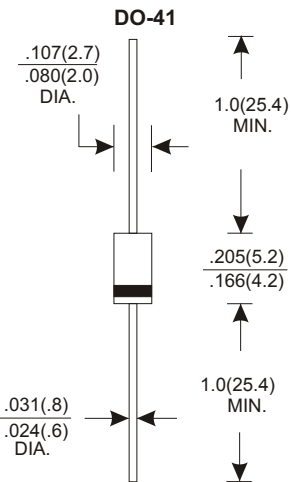
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- Weight: 0.34 grams
- * Both normal and Pb free product are available:
- * Normal:80~95%Sn,5~20%Pb
- * Pb free:99 Sn above can meet Rohs enviroment substance directive request

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.0 Ampere



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unies otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	GP10A	GP10B	GP10D	GP10G	GP10J	GP10K	GP10M	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current									
.375"(9.5mm) Lead Length at Ta=75°C								1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								40	A
Maximum Instantaneous Forward Voltage at 1.0A								1.0	V
Maximum DC Reverse Current Ta=25°C								5.0	uA
at Rated DC Blocking Voltage Ta=100°C								50	uA
Typical Junction Capacitance (Note 1)								15	pF
Maximum Reverse Recovery Time (Note 2)								2500	nS
Typical Thermal Resistance R JA (Note 3)								50	°C/W
Operating and Storage Temperature Range Tj, TSTG								-65 — +150	°C

NOTES:

2. Reverse Recovery Time test condition:IF=1.0A, VR=30V.
3. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (GP10A THRU GP10M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

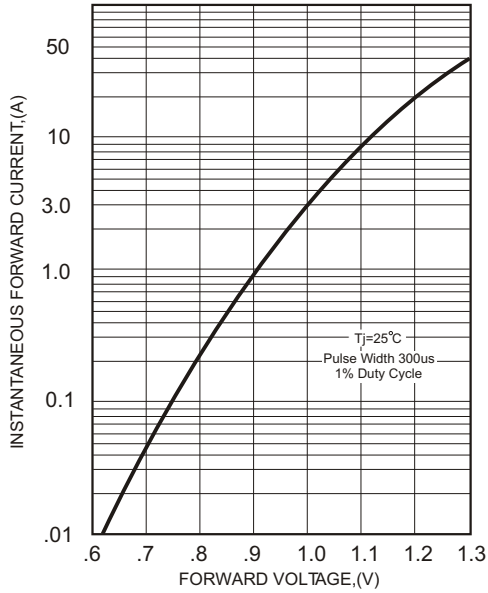


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

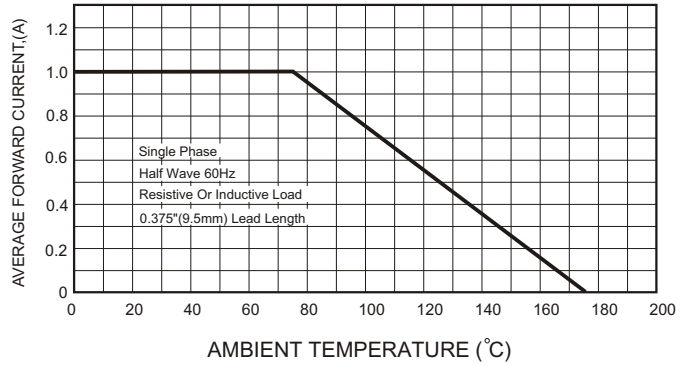


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

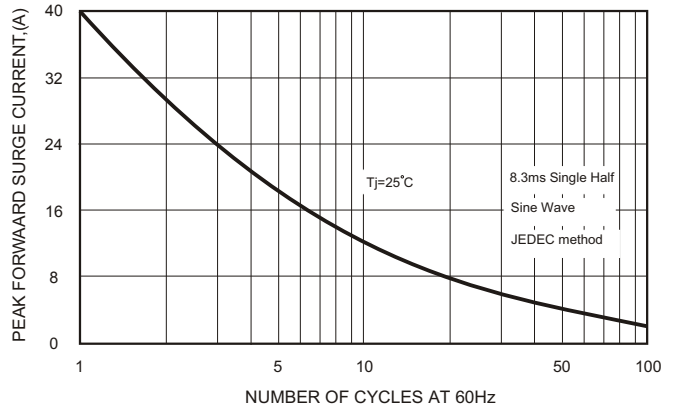


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

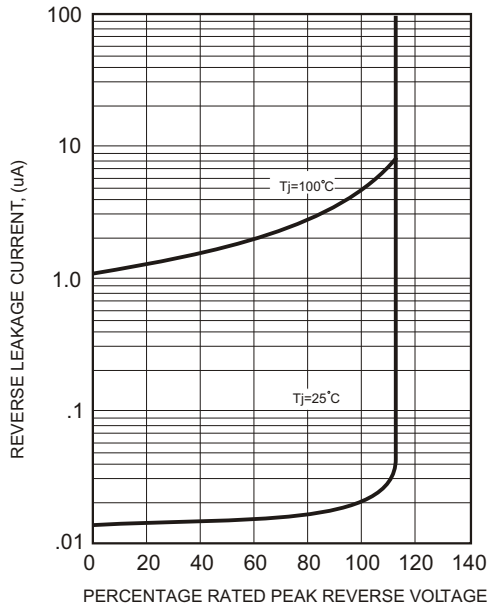


FIG.5-TYPICAL JUNCTION CAPACITANCE

