

GP02-15AT

HIGH VOLTAGE RECTIFIER

Forward Current-1.5A

Reverse Voltage-2000V

FEATURES

- ◆ Glass passivated chip junction
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- ◆ Case: JEDEC DO-41 molded plastic body
- ◆ Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ◆ Mounting Position: Any
- ◆ Weight: Approximated 0.3 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derating by 20 %.

PARAMETER	SYMBOL	GP02-15AT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	2000	V
Maximum RMS Voltage	V_{RMS}	1400	V
Maximum DC Blocking Voltage	V_{DC}	2000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (see FIG.1)	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current (Note1)	I_{FSM}	30	A
Maximum Forward Voltage at 1.5 A	V_F	2.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	I_R	5.0 50	μA
Typical Junction Capacitance at $V_R=4V$, $f=1MHz$	C_J	5.0	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	50	$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^{\circ}C$

Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

2. Measured at 0.375" (9.5mm) lead length, P.C.B. mounted.

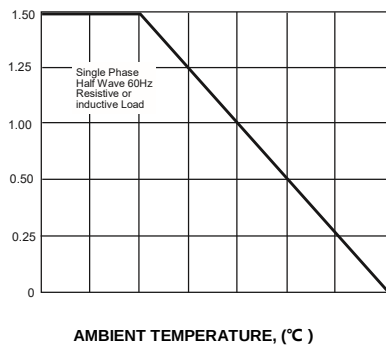
Dated: 06/2016

Rev:1.0

RATINGS AND CHARACTERISTIC CURVES

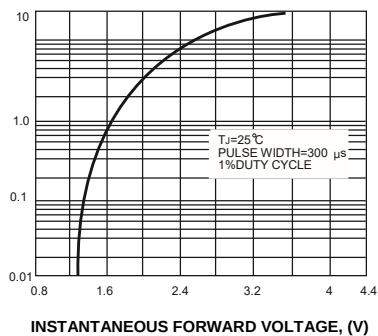
AVERAGE FORWARD RECTIFIED CURRENT, (A)

FIG. 1-FORWARD CURRENT DERATING CURVE



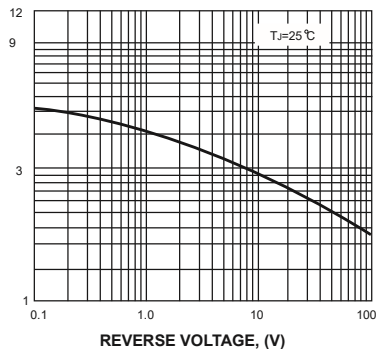
INSTANTANEOUS FORWARD CURRENT, (A)

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



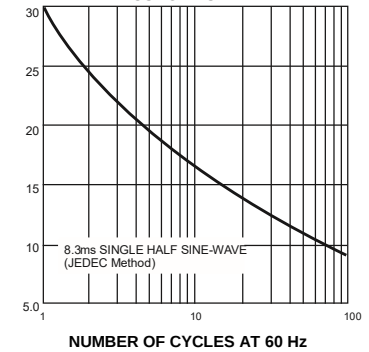
JUNCTION CAPACITANCE, (pF)

FIG. 5-TYPICAL JUNCTION CAPACITANCE



PEAK FORWARD SURGE CURRENT, (A)

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS REVERSE CURRENT, (mA)

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

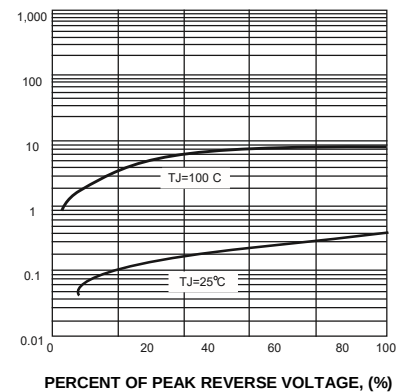
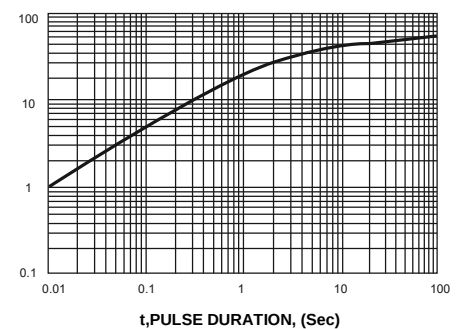
TRANSIENT THERMAL IMPEDANCE, ($^{\circ}\text{C}/\text{W}$)

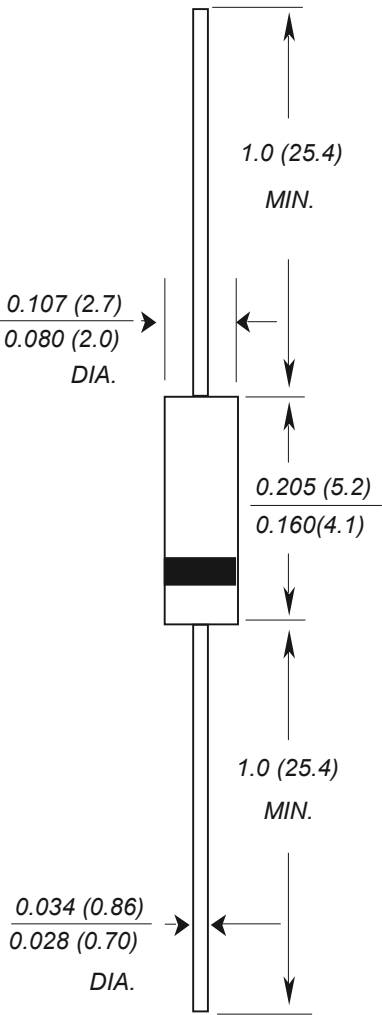
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



GP02-15AT

PACKAGE OUTLINE

DO-41



Dimensions in inches and (millimeters)

ORDERING INFORMATION

Device	Package	Shipping
GP02-15AT	DO-41	5,000/Ammo Pack

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