GP02-20 ~ GP02-40

PRV : 2000 - 4000 Volts
Io : 0.25 Ampere

MINIATURE HIGH VOLTAGE GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

FEATURES :

* Glass passivated junction
* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Pb / RoHS Free

MECHANICAL DATA :

* Case : DO-41 Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.339 gram

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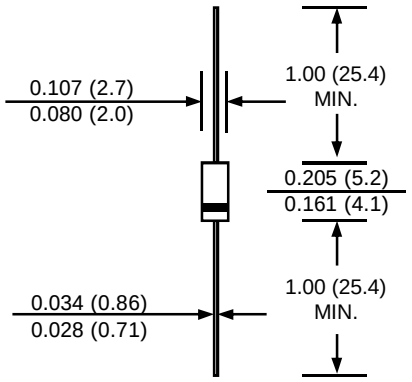

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	GP02-20	GP02-25	GP02-30	GP02-35	GP02-40	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	2000	2500	3000	3500	4000	V
Maximum RMS Voltage	V_{RMS}	1400	1750	2100	2450	2800	V
Maximum DC Blocking Voltage	V_{DC}	2000	2500	3000	3500	4000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	$I_{F(AV)}$	0.25					A
Peak Forward Surge Current 8.3 ms. Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	15					A
Maximum Forward Voltage at 1.0 A	V_F	3.0					V
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0					μA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50					μA
Typical Reverse Recovery Time (Note 1)	Trr	2.0					μs
Typical Junction Capacitance (Note 2)	C_J	3.0					pF
Typical Thermal Resistance (Note 3)	RθJA	130					°C/W
Junction Temperature Range	T_J	- 65 to + 175					°C
Storage Temperature Range	T_{STG}	- 65 to + 175					°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, Irr = 0.25 A.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC
(3) Thermal Resistance from Junction to Ambient at 0.375"(9.5mm) Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (GP02-20 ~ GP02-40)

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

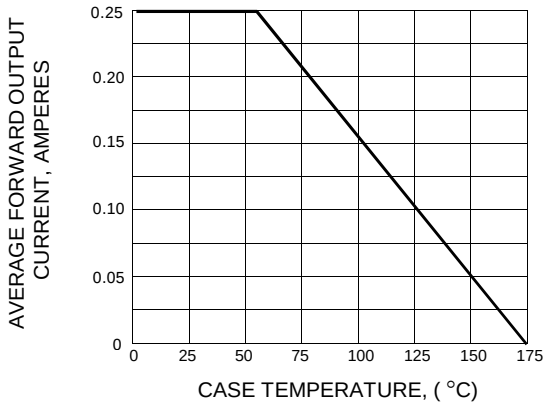

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

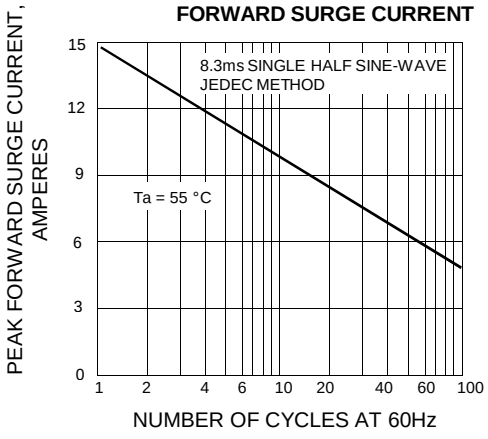

FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

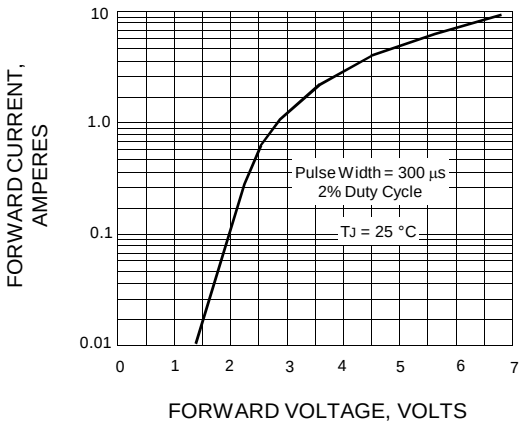

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

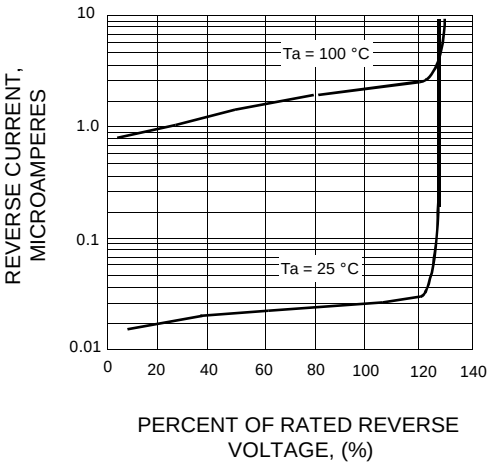

FIG 5 . - TYPICAL JUNCTION CAPACITANCE