TAYCHIPST

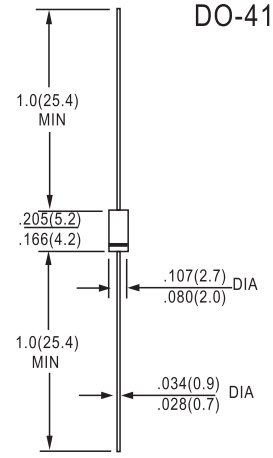
HIGH VOLTAGE GLASS PASSIVATED JUNCTION RECTIFIER

GP02-20 THRU GP02-40

2000V-4000V 0.25A

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junctions
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-204AL molded plastic over glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GP02-20	GP02-25	GP02-30	GP02-35	GP02-40	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	2000	2500	3000	3500	4000	Volts
Maximum RMS Voltage	V_{RMS}	1400	1750	2100	2450	2800	Volts
Maximum DC blocking voltage	V_{DC}	2000	2500	3000	3500	4000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A=55°C	$I_{(AV)}$	0.25					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load at: (JEDEC Method) T_A=55°C	I_{FSM}	15.0					Amps
Maximum instantaneous forward voltage at 1.0A	V_F	3.0					Volts
Maximum DC reverse current T_A= 25°C at rated DC blocking voltage T_A=100°C	I_R	5.0 50.0					µA
Typical reverse recovery time (NOTE 1)	t_{rr}	2.0					µs
Typical junction capacitance (NOTE 2)	C_J	3.0					pF
Typical thermal resistance (NOTE 3)	$R_{\Theta JA}$	130.0					°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					°C

NOTES:
(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead lengths, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES GP02-20 THRU GP02-40

FIG. 1 - FORWARD CURRENT DERATING

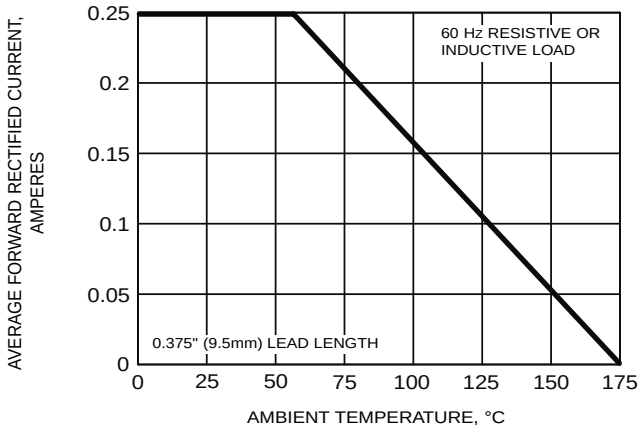


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

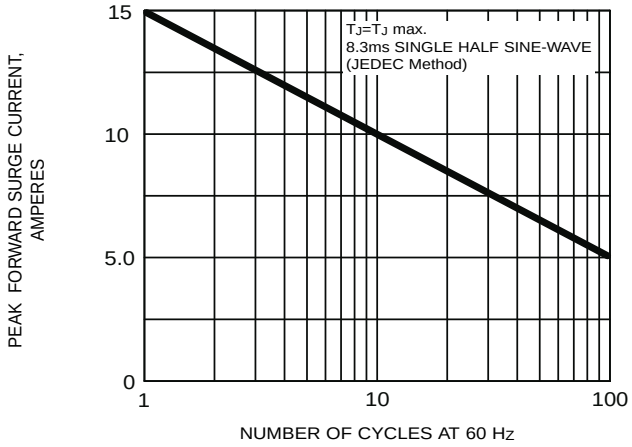


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

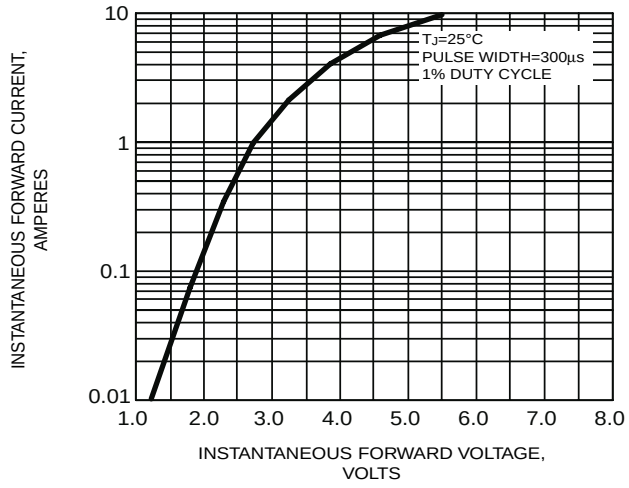


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

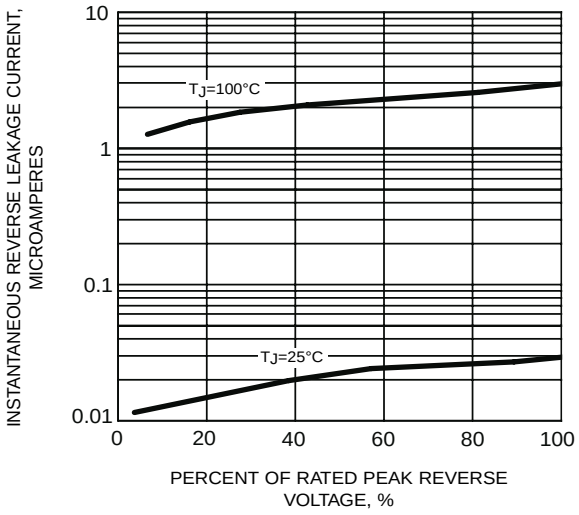


FIG. 5 - TYPICAL JUNCTION CAPACITANCE