Olitech Electronics Co. Ltd

Email: info@olitech-elec.com Website: www.olitech-elec.com

GP02-12 THRU GP02-20

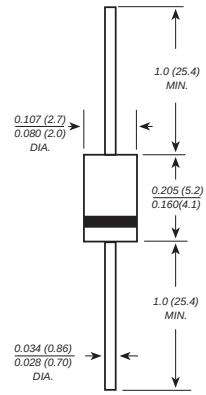
High Voltage 1.5A Sintered Glass Passivated Rectifie

VOLTAGE RANGE **1200 to 2000 Volts**
CURRENT **1.5 Ampere**

FEATURES

- GPRC (Glass Passivated Rectifier Chip) inside
- Glass passivated cavity - free junction
- Capable of meeting environmental standards of MIL-S-19500
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed:
  260℃/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension
- RoHS Compliance

DO-41



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case : JEDEC DO-41 molded plastic over glass body
- Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight :0.012 ounce, 0.33 grams(DO-41)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ ambient temperature unless otherwise specified.
- Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	GP02-12	GP02-15	GP02-18	GP02-20	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1500	1800	2000	VOLTS
Maximum RMS voltage	V_{RMS}	840	1050	1260	1400	VOLTS
Maximum DC blocking voltage	V_{DC}	1200	1500	1800	2000	VOLTS
Maximum average forward rectified current 0.375”(9.5mm) lead length (see fig.1)	$I_{(AV)}$	1.5				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0				Amps
Maximum instantaneous forward voltage at 1.5 A	V_F	2.0				Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	5.0 50.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	2.0				uS
Typical junction capacitance (NOTE 2)	C_J	3.0				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	50.0				°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175				°C

Note:1.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V.
3.Thermal resistance from junction to ambient at 0.375”(9.5mm)lead length,P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

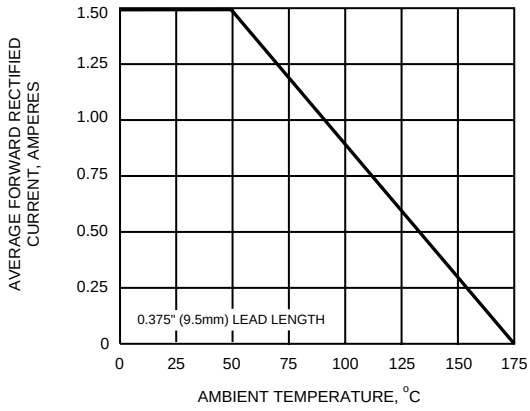


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

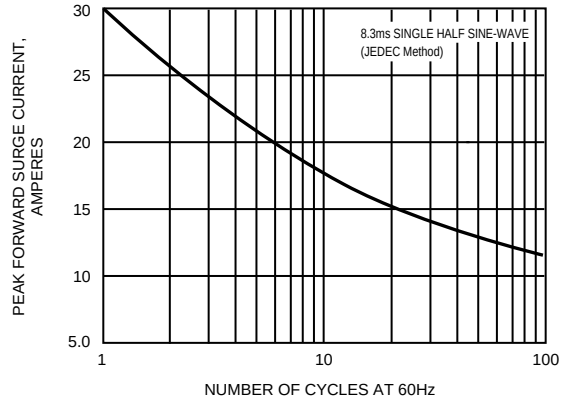


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

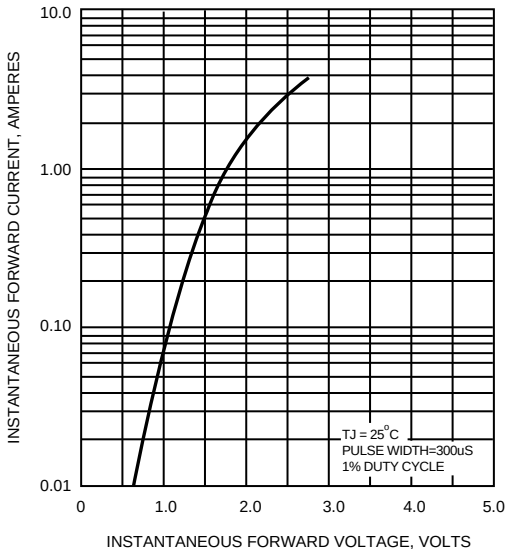


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

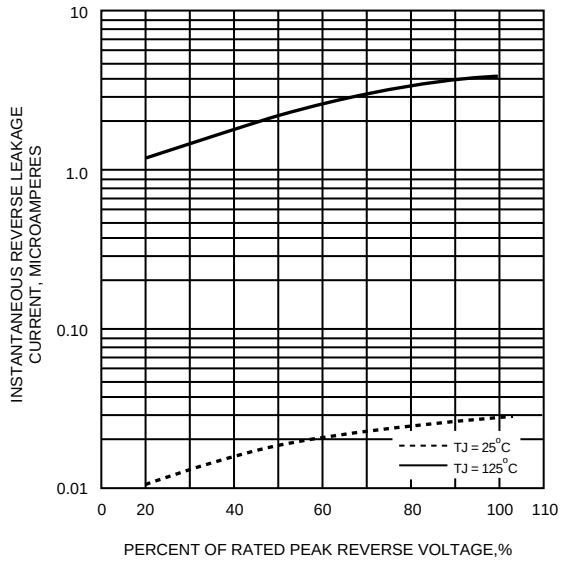


FIG.5 - TYPICAL JUNCTION CAPACITANCE

