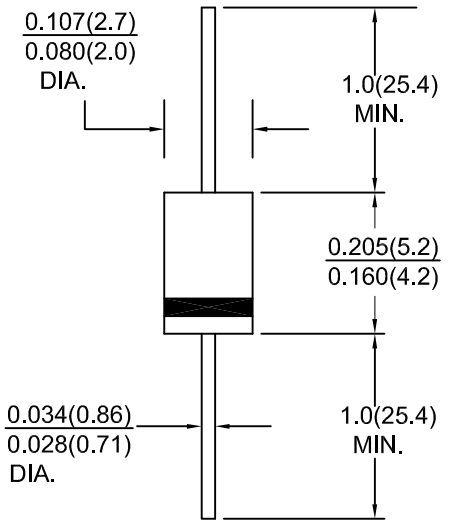
GP1-16 THRU GP1-20

HIGH VOLTAGE SILICON RECTIFIER

FEATURES:

- Molded case feature for auto insertion
- High current capability
- Low leakage current
- High surge capability
- High temperature soldering:
  250℃/10 second/0.375"(9.5mm) lead lenght
  at 5 lbs tension

DO-41



MECHANICAL DATA

Case: Molded with UL-94 Class V-0 recognized flame retardant epoxy
Terminals: Plated axial solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode
Mounting Position : Any

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	GP1-16	GP1-18	GP1-20	Units
Maximum recurrent peak reverse voltage	V_{RRM}	1600	1800	2000	Volts
Maximum RMS voltage	V_{RMS}	1120	1270	1400	Volts
Maximum DC voltage	VDC	1600	1800	2000	Volts
Maximum average forward rectified current at Ta=55 ℃	$I_{(AV)}$	1.0			Amps
Peak forward surge current, 8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I_{FSM}	30			Amps
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.1	1.3		Volts
Maximum DC reverse current Ta=25° C	I_R	5	10		μA
At DC blocking voltage Ta=100° C		100			
Operating Junction and storage temperature range	T_J, Tstg	-55 to+175	-65 to+150		℃

FIG.1 - MAXIMUM FORWARD CORRENT DERATING CURVE

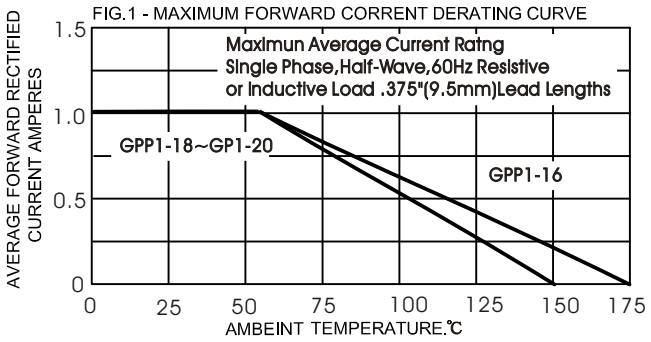


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

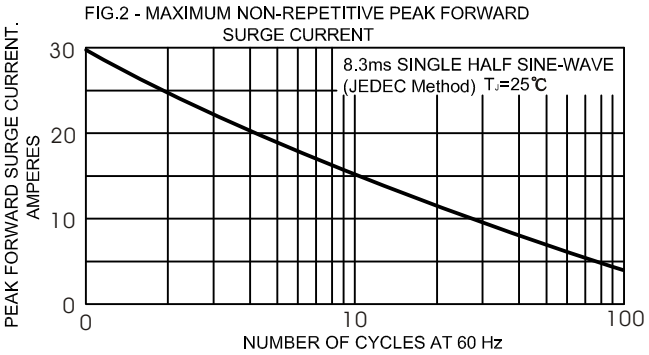


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

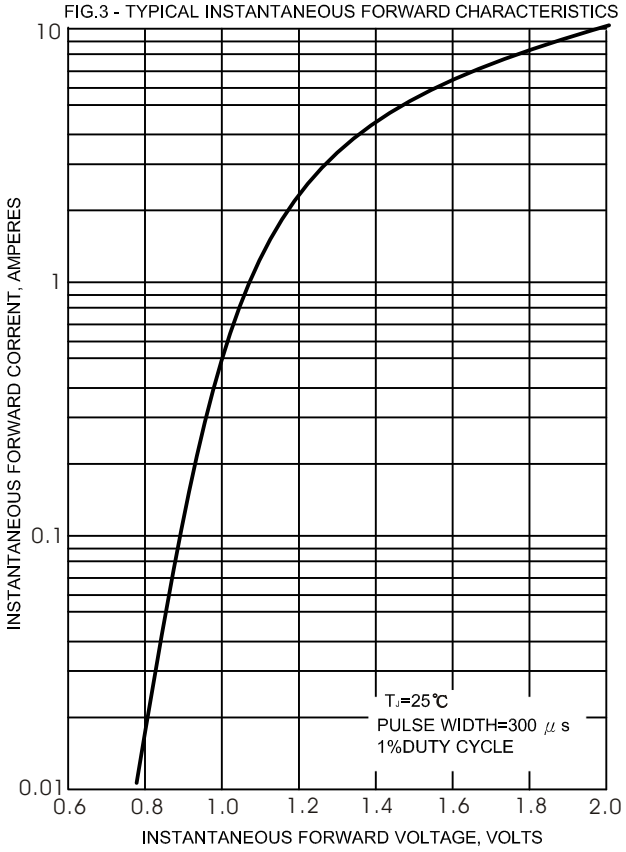


FIG.4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS