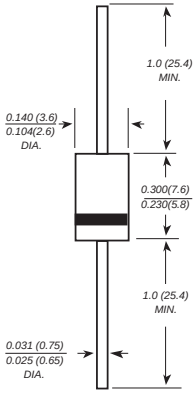
CGP15 THRU FGP15

HIGH VOLTAGE RECTIFIER

DO-15



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-15 molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.014 ounce, 0.40 grams

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	CGP15	DGP15	EGP15	FGP15	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1300	1600	1800	2000	VOLTS
Maximum RMS voltage	V_{RMS}	910	1120	1260	1400	VOLTS
Maximum DC blocking voltage	V_{DC}	1300	1600	1800	2000	VOLTS
Maximum average forward rectified current at T_L=110℃	$I_{(AV)}$	1.5				Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60.0				Amps
Maximum instantaneous forward voltage at 1.5A	V_F	1.1				Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	5.0 50.0				uA
Typical junction capacitance (NOTE 1)	C_J	15.0				pF
Typical thermal resistance (NOTE 2)	R_{qJA}	70.0				°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150				°C
Maximum reverse recovery time (NOTE 1)	t_{rr}	1.5				us

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

FIG. 1- FORWARD CURRENT DERATING CURVE

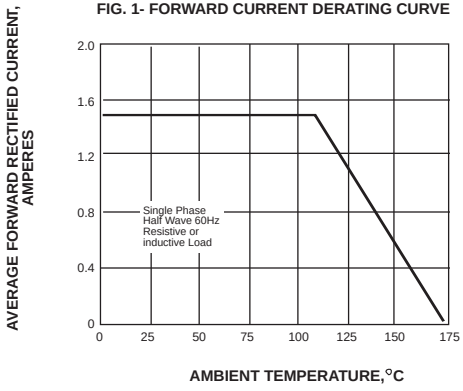


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

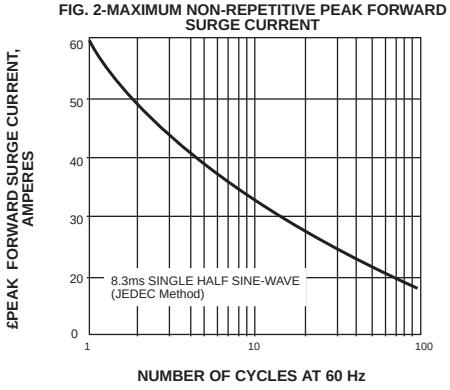


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

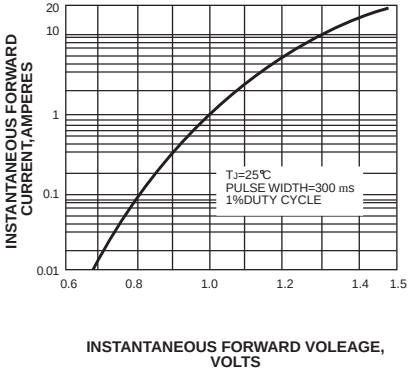


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

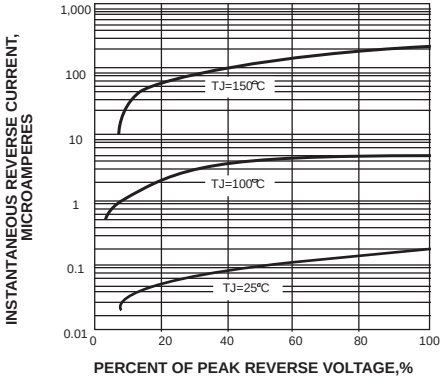


FIG. 5-TYPICAL JUNCTION CAPACITANCE

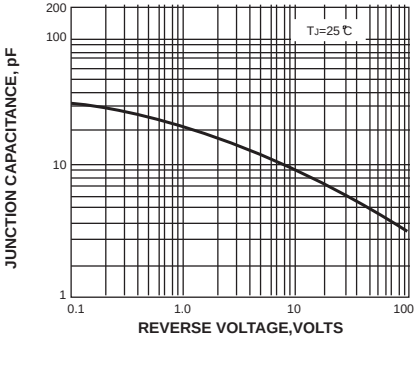


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE