



**FRONTIER  
ELECTRONICS CO., LTD.**

**CLAMPER/DAMPER RECTIFIER**

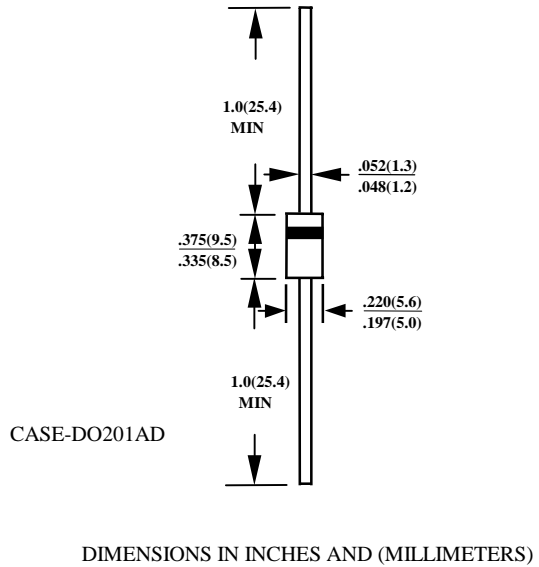
**CG3  
&  
DG3**

**FEATURES**

- DESIGNED FOR CLAMPING, DAMPING CIRCUIT OF HORIZONTAL DEFLECTION SYSTEM
- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- VOID-FREE MOLDED PLASTIC
- HIGH TEMPERATURE SOLDERING GUARANTEED : 260°C/10 SECONDS/.375" (9.5mm) LEAD LENGTH/5 LBS. (2.3KG)

**MECHANICAL DATA**

- CASE : MOLDED CASE
- TERMINAL : AXIAL LEADS, SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY : COLOR BAND DENOTES CATHODE
- MOUNTING POSITION : ANY
- WEIGHT : 1.2 GRAMS



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
 RATINGS 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%

RATINGS	SYMBOL	CG3	DG3	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	1400	1500	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	980	1050	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	1400	1500	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	$I_O$	3.0		A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	100		A
TYPICAL JUNCTION CAPACITANCE (NOTE 2)	$C_J$	40		PF
TYPICAL THERMAL RESISTANCE (NOTE 3)	$R_{\theta ja}$	20		°C/W
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150		°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	-55 TO + 125		°C

**ELECTRICAL CHARACTERISTICS (A<sub>T</sub> T<sub>A</sub> =25°C UNLESS OTHERWISE NOTED)**

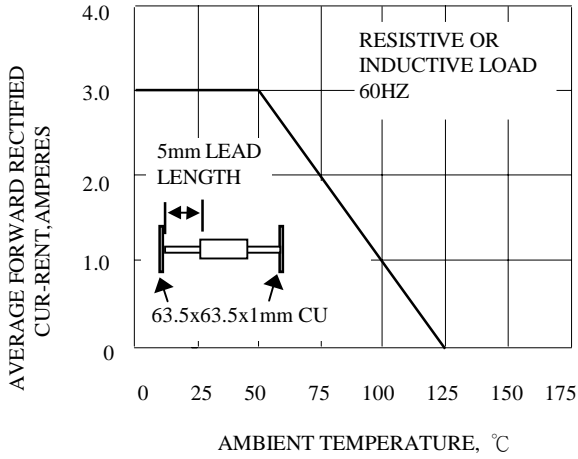
CHARACTERISTICS	SYMBOL	CG3	DG3	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_O$ DC	$V_F$	1.2		V
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	5		μA
MAXIMUM REVERSE CURRENT AT 100°C	$I_{RR}$	50		μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 1)	$T_{RR}$	15	20	μS

NOTE :

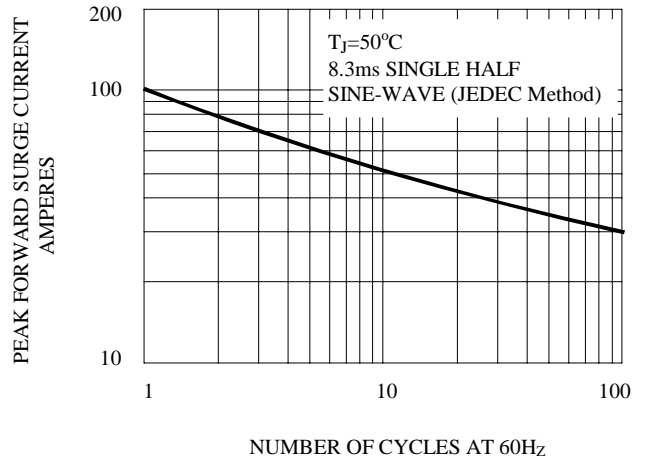
1. REVERSE RECOVERY TEST CONDITIONS:  $I_F=0.5A$ ,  $I_R=50mA$
2. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
3. BOTH LEADS ATTACHED TO HEATSINK63.5×63.5×1t(mm) COPPER PLATE AT LEAD LENTH 5mm

# RATINGS ANSD CHARACTERISTIC CRVES CG3 THRU DG3

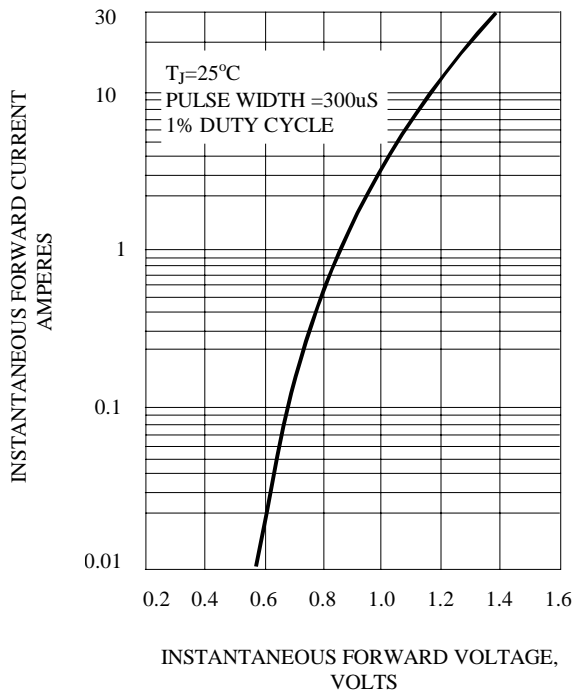
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



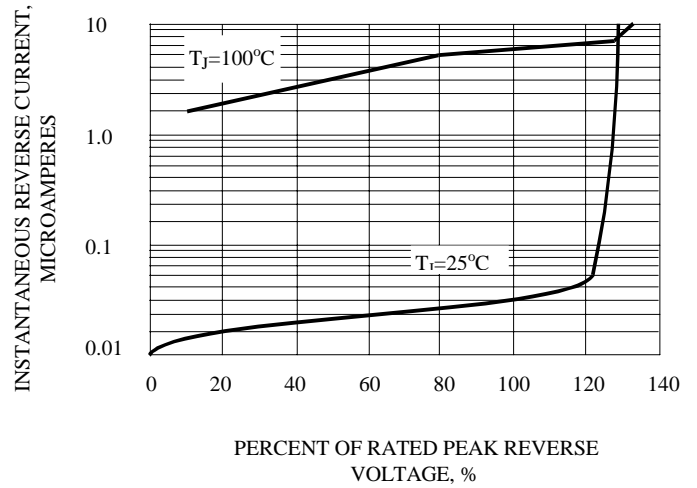
**Fig. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 -TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE**

