



# Frontier Electronics Corp.

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## CLAMPER/DAMPER RECTIFIER

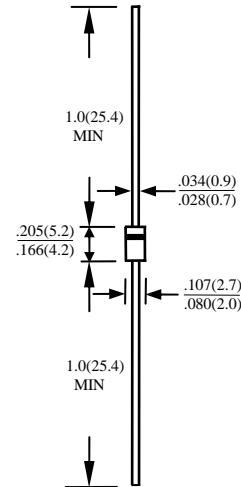
### CG1 & DG1

#### 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/0.375"(9.5mm) LEAD LENGTH/5 LBS. (2.3KG)

#### MECHANICAL DATA

- CASE: MOLDED CASE, DO41, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINAL: AXIAL LEADS, SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE
- MOUNTING POSITION: ANY
- WEIGHT: 0.34 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	CG1	DG1	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 )	$I_O$	1.5		A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	40		A
TYPICAL JUNCTION CAPACITANCE (NOTE 2)	$C_J$	15		PF
TYPICAL THERMAL RESISTANCE (NOTE 3)	$R_{\theta ja}$	50		°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	CG1	DG1	UNITS
MAXIMUM FORWARD VOLTAGE AT I <sub>O</sub> DC	$V_F$	1.1		V
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	5		μA
MAXIMUM REVERSE CURRENT AT 100°C	$I_R$	50		μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 1)	$T_{RR}$	15	20	uS

NOTE: 1. REVERSE RECOVERY TEST CONDITIONS: I<sub>F</sub>=0.5A, I<sub>R</sub>=50mA

2. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS

3. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

# RATINGS AND CHARACTERISTIC CURVES CG1 THRU DG1

FIG. 1 - FORWARD CURRENT DERATING CURVE

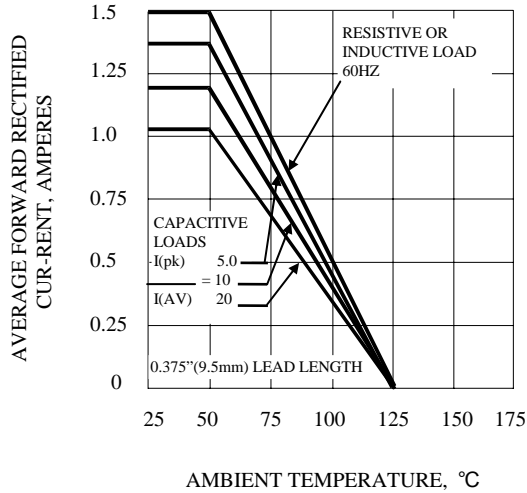


Fig. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

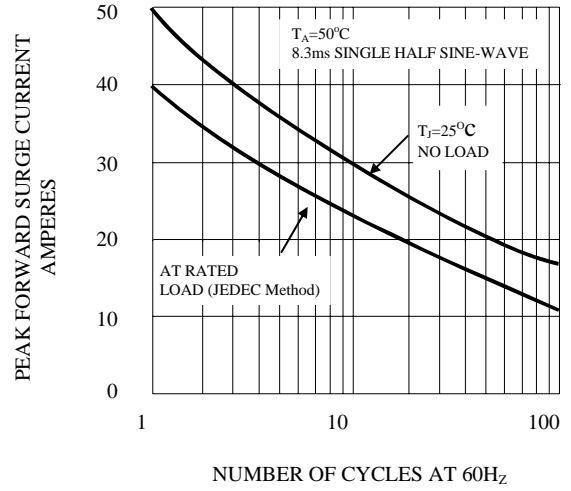


FIG. 3 -TYPICAL REVERSE CHARACTERISTICS

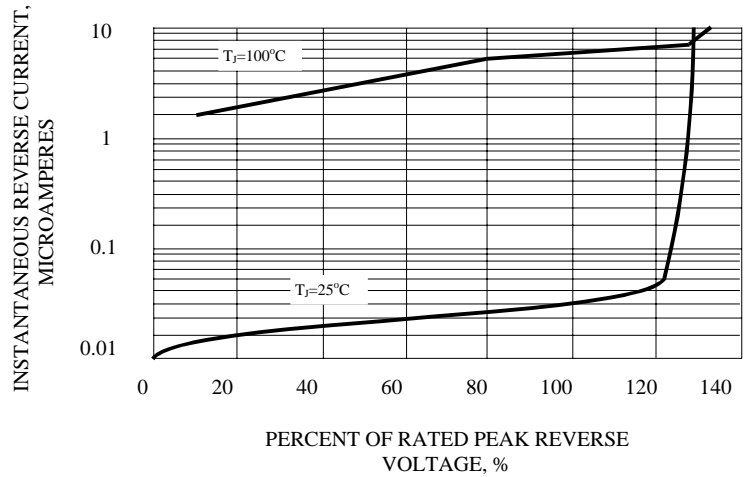


FIG. 4 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

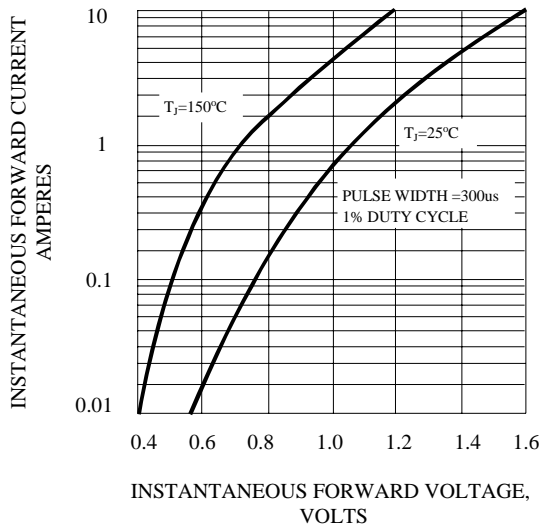


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

