

## 3A CLAMPER/DAMPER RECTIFIER

BY228/13 THRU BY228/15

## **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)

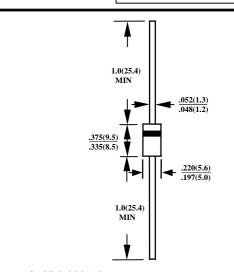
### MECHANICAL DATA

- CASE : MOLDED CASE
- TERMINAL: AXIAL LEADS, SOLDERABLE PER MIL-STD-202,

METHOD 208

• POLARITY: COLOR BAND DENOTES CATHODE

MOUNTING POSITION : ANYWEIGHT : 1.2 GRAMS



CASE-DO201AD DIMENSIONS IN INCHES AND (MILLIMETERS)

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	BY228/13	BY228/15	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	1300	1500	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	910	1050	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	1300	1500	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT ( SEE FIG.1 )	Io	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 1)	$C_{J}$	40		PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	20		°C/W
STORAGE TEMPERATURE RANGE	T <sub>STG</sub>	- 55 TO + 150		$^{\circ}\mathbb{C}$
OPERATING TEMPERATURE RANGE	T <sub>OP</sub>	-55 TO	+ 125	$^{\circ}\mathbb{C}$

ELECTRICAL CHARACTERISTICS ( $A_T T_A = 25$ °C UNLESS OTHERWISE NOTED)

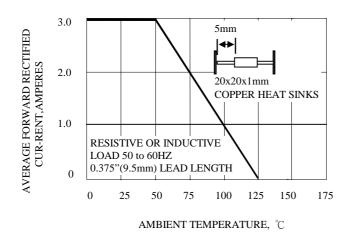
CHARACTERISTICS	SYMBOL	BY228/13	BY228/15	UNITS
MAXIMUM FORWARD VOLTAGE AT I <sub>0</sub> DC	$V_{\mathrm{F}}$	1.5@5A		V
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	5		μΑ
MAXIMUM REVERSE CURRENT AT100℃	$I_R$	50		μΑ
MAXIMUM REVERSE RECOVERY TIME ( NOTE 3 )	$T_{RR}$	2	0	μS
MAXIMUM FORWARD RECOVERY TIME ( NOTE 4 )	$T_{FR}$	1.	.0	μS

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

- 2. BOTH LEADS ATTATCHED TO HEATSINK 63.5×63.5×1t(mm) COPPER PLATE AT LEAD LENTH 5mm
- 3. TEST CONDITIONS:  $I_{F}\!\!=1.0A,\,I_{R}\!\!=50mA,\,di/dt\!\!=\!\!50\,mA/uS$
- 4. TEST CONDITIONS:  $I_F$ = 5.0A,  $T_R$ =0.1uS

## RATINGS ANSD CHARACTERISTIC CRVES BY228/13 THRU BY228/15

### FIG. 1 - FORWARD CURRENT DERATING CURVE



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

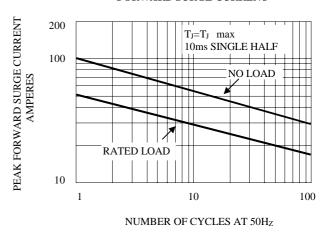


FIG. 3 - MAXIMUM PEAK REPETITIVE FORWARD SURGE CURRENT

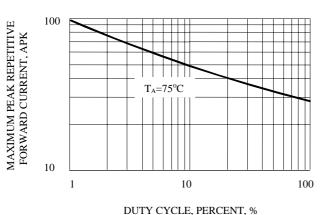


FIG. 4 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

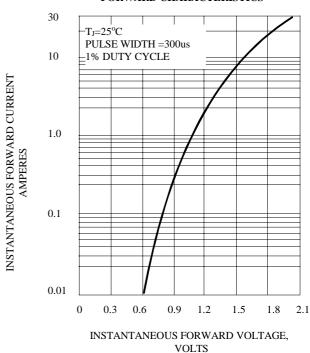
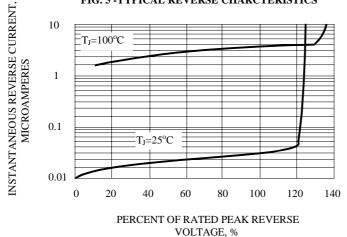


FIG. 5 - TYPICAL REVERSE CHARCTERISTICS



## FIG. 6-TYPICAL JUNCTION CAPACITANCE

