



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

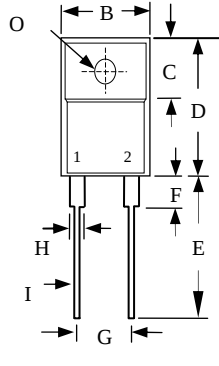
E-mail: frontiersales@frontierusa.com

Web: <http://www.frontierusa.com>

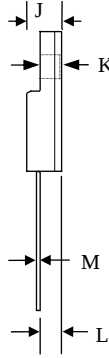
DAMPER DIODE FAST , HIGH VOLTAGE

BY329X-1500 AND BY329X-1500S

CASE : ITO-220AC (BY329X-XX) , FULLY INSULATED PACKAGE



PIN 1 PIN 2
CASE



	MILLIMETERS	
	MIN	MAX
B	9.72	10.27
C	6.30	6.90
D	14.50	15.50
E	13.00	13.80
F	-	4.1
G	4.95	5.20
H	-	1.52
I	-	0.9
J	-	4.8
K	-	3.1
L	2.5	2.9
M	-	0.8
O	-	Ø 3.4

FEATURES

- LOW FORWARD VOLTAGE
- FAST SWITCHING
- SOFT RECOVERY CHARACTERISTIC
- HIGH THERMAL CYCLING PERFORMANCE
- ISOLATED MOUNTING TAB
- GLASS PASSIVATED CHIP JUNCTION

MECHANICAL DATA

- CASE: TRANSFER MOLDED
- TERMINAL: MIL-STD-202F METHOD 2026
- POLARITY: AS MARKED
- EPOXY: UL94V-0 FLAME RETARDANT MOLDING COMPOUND
- MOUNTING POSITION: ANY
- WEIGHT 1.81 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	BY329X-1500	BY329X-1500S	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	1500		V
MAXIMUM RMS VOLTAGE	V_{RMS}	1050		V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	1500		V
PEAK WORKING FORWARD CURRENT	I_O	6A@16KHz	6A@70KHz	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	75		A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	25		PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jc}$	2.0		°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150		°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 150		°C

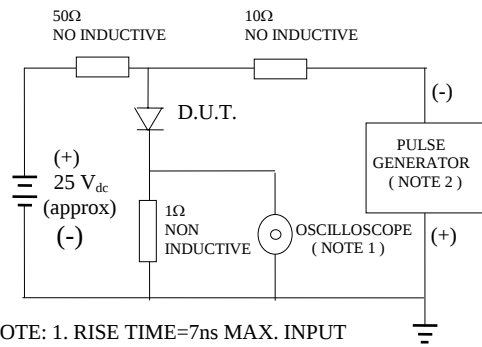
ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

MAXIMUM FORWARD VOLTAGE AT 6.5A DC	V_F	1.45	1.6	V
MAXIMUM DC REVERSE CURRENT AT T_A =25°C	I_R	250		μA
MAXIMUM DC REVERSE CURRENT AT T_A =125°C	I_R	1		mA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	350	250	nS

- NOTES: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. THERMAL RESISTANCE JUNCTION TO CASE PER LEG MOUNTED ON HEAT SINK
3. REVERSE RECOVERY TEST CONDITIONS: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A

RATINGS AND CHARACTERISTIC CURVE BY329X-1500 THRU BY329X-1500S

FIG. 1 -TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
2. RISE TIME =10 ns MAX. SOURCE IMPEDANCE=50 OHMS

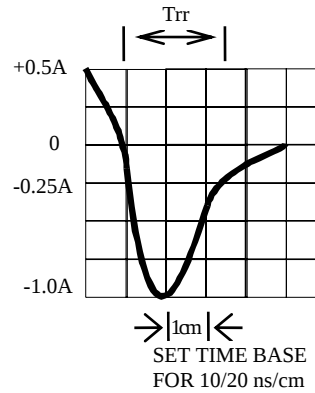


FIG. 2 -TYPICAL FORWARD CURRENT DERATING CURVE

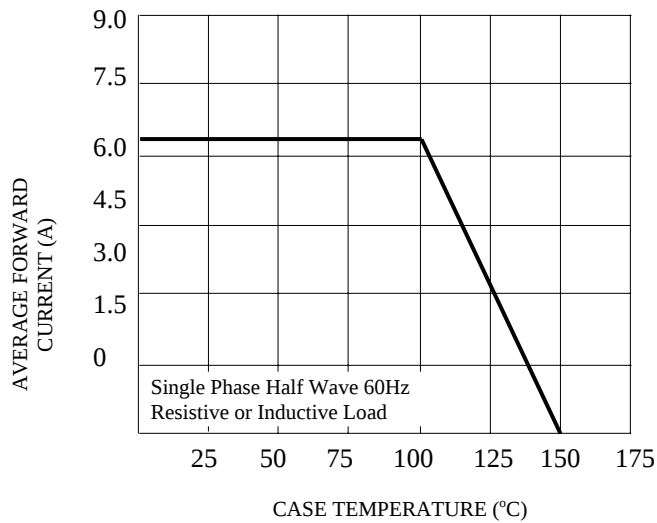


FIG. 3 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

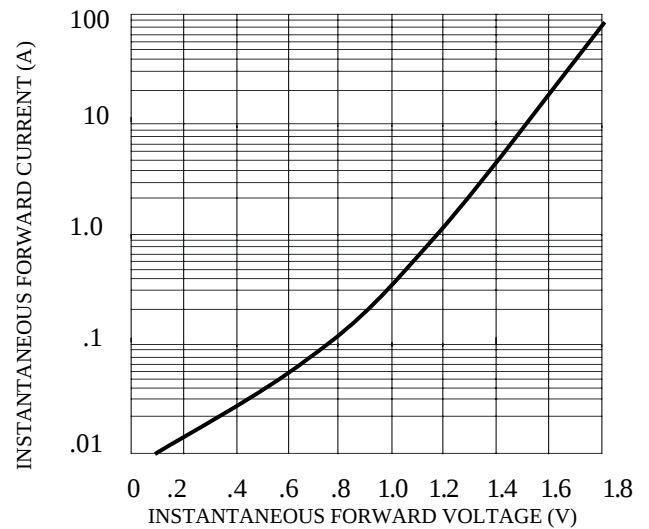


FIG. 4 -TYPICAL REVERSE CHARACTERISTICS

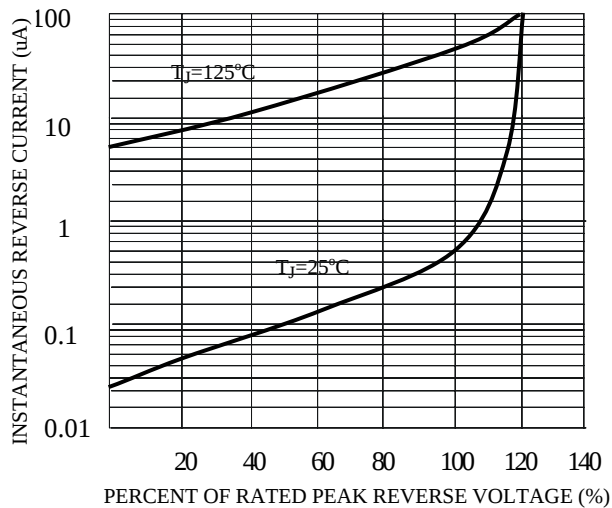


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

