PANJIT SEMI CONDUCTOR

UF800~UF808

ULTRAFAST RECOCVEY RECTIFIERS

VOLTAGE 50 to 800 Volt **CURRENT** 8 Ampere

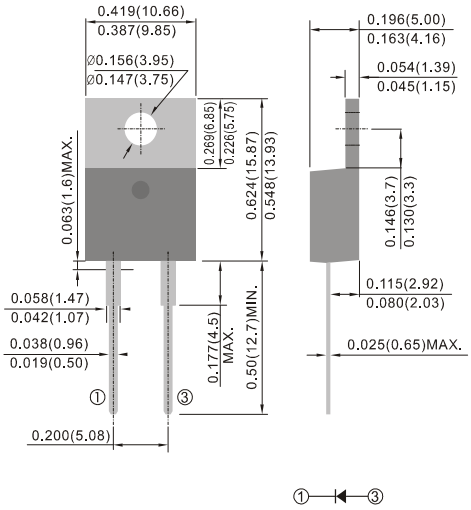
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Ultra fast recovery times, high voltage.
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANCAL DATA

- Case: TO-220AC molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.067 ounces, 1.89 grams.

TO-220AC Unit : inch(mm)



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%

PARAMETER	SYMBOL	UF800	UF801	UF802	UF803	UF804	UF806	UF808	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	V
Maximum Average Forward Rectified Current at T_C=100°C	$I_{F(AV)}$	8							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	125							A
Maximum Forward Voltage at 8A	V_F	1			1.3		1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C T_J=125°C	I_R	1 500							μA
Maximum Thermal Resistance (Note 2)	$R_{\theta JC}$	5							°C / W
Typical Junction Capacitance	C_J	80					50		pF
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50					100		ns
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
2. Thermal resistance from Junction to ambient and from junction to lead 0.375" (9.5mm) P.C.B mounted.

UF800~UF808

RATING AND CHARACTERISTIC CURVES

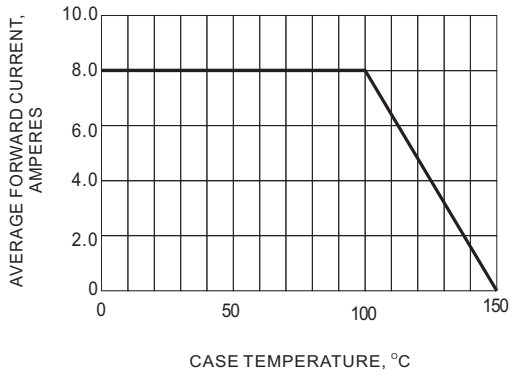


Fig.1 FORWARD CURRENT DERATING CURVE

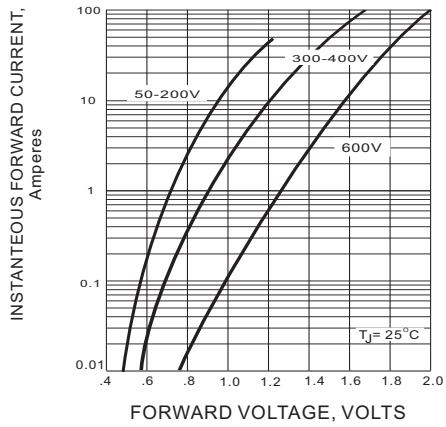


Fig.2 FORWARD CHARACTERISTICS

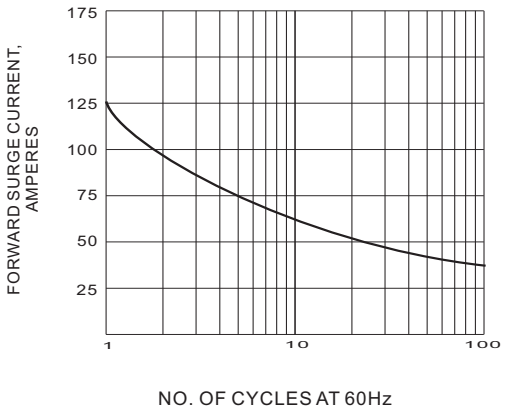


Fig.3 PEAK FORWARD SURGE CURRENT

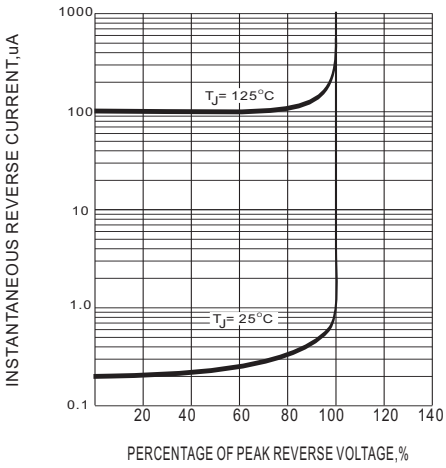


Fig.4 TYPICAL REVERSE CHARACTERISTICS

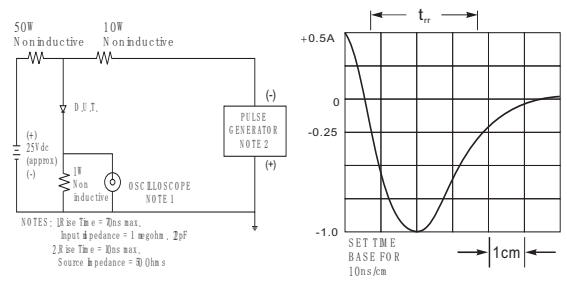


Fig.5 REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

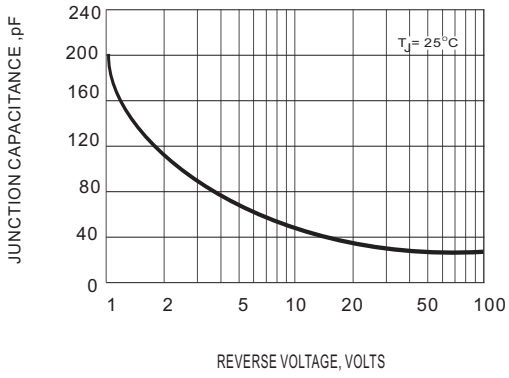


Fig.6 TYPICAL JUNCTION CHARACTERISTICS

UF800~UF808

Part No_packing code_Version

UF800_T0_00001

For example :

RB500V-40_R2_00001

- Part No.
- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.