PANJIT SEMI CONDUCTOR

UF2002FCT SERIES

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 200 to 600 Volt **CURRENT** 20 Ampere

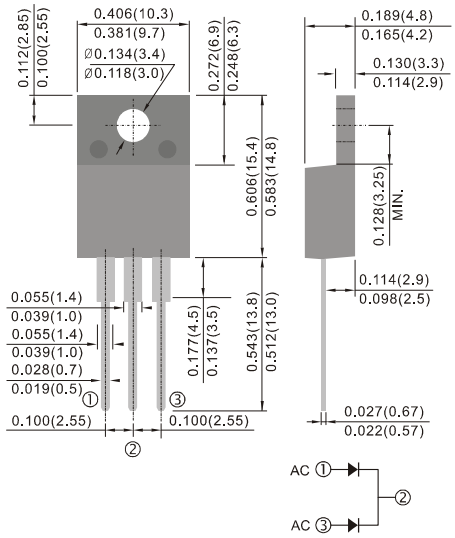
FEATURES

- 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 compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANCAL DATA

- Case: ITO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.056 ounces, 1.6 grams

ITO-220AB 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	UF2002FCT	UF2003FCT	UF2004FCT	UF2006FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	300	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	20				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150				A
Maximum Forward Voltage at 10A	V_F	1	1.3		1.7	V
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=125°C	I_R	1 250				μA
Typical Junction Capacitance (Notes 1)	C_J	200				pF
Maximum Reverse Recovery Time (Notes 2)	t_{rr}	50			100	ns
Typical Thermal Resistance (Notes 3)	$R_{\theta JC}$	7				°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150				°C

NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Reverse recovery test conditions: I_F=0.5A, I_R=-1A, Irr=-0.25A.
3. Thermal resistance from junction to ambient and from junction to lead

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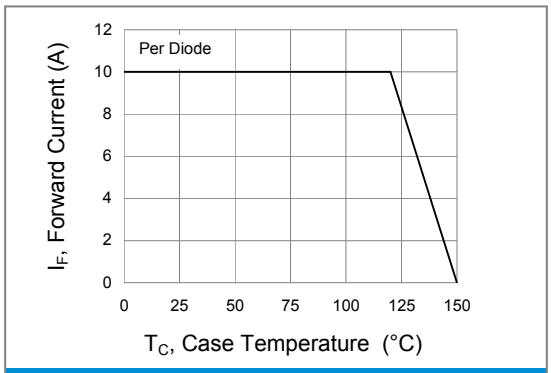

Fig.1 Forward Current Derating Curve

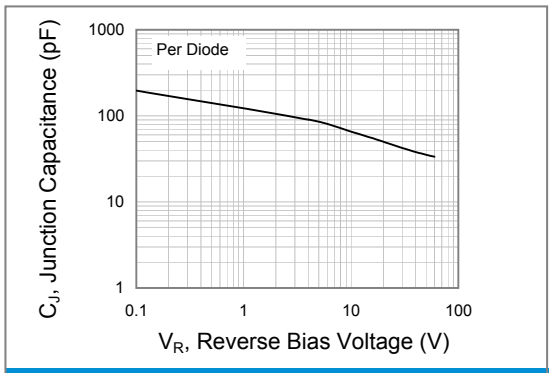

Fig.2 Typical Junction Capacitance

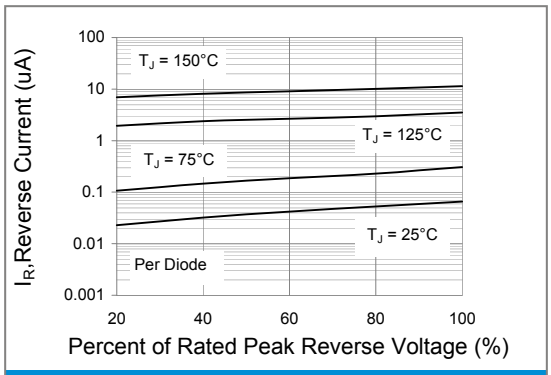

Fig.3 UF2002FCT Typical Reverse Characteristics

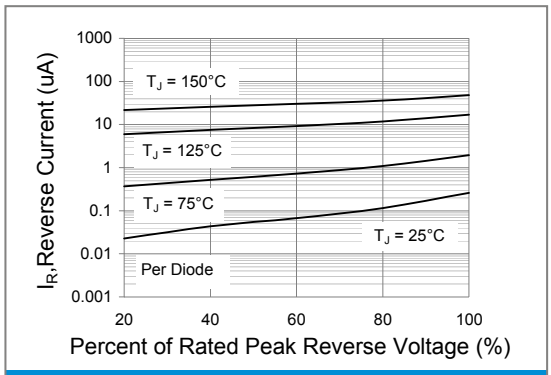

Fig.4 UF2003FCT & UF2004FCT Typical Reverse Characteristics

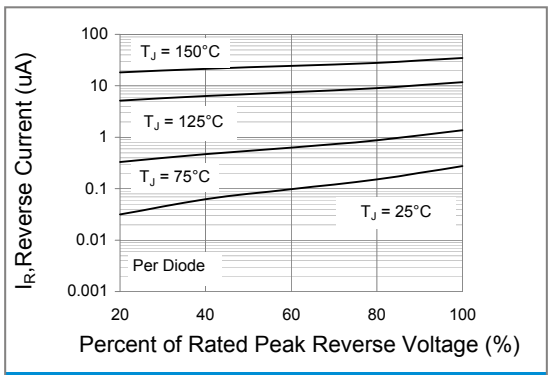

Fig.5 UF2006FCT Typical Reverse Characteristics

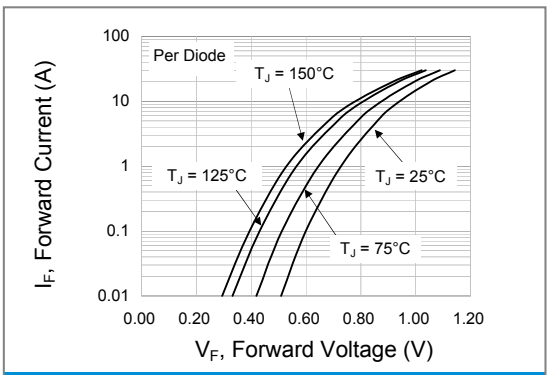

Fig.6 UF2002FCT Typical Forward Characteristics

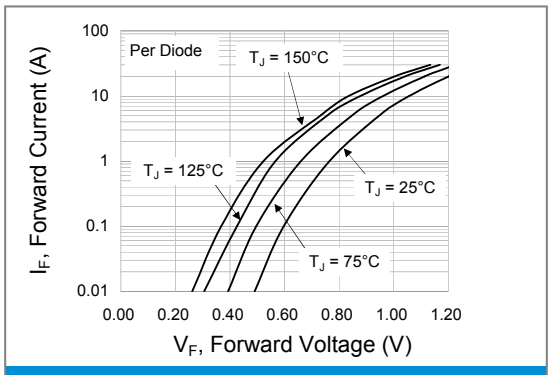

Fig.7 UF2003FCT & UF2004FCT Typical Forward Characteristics

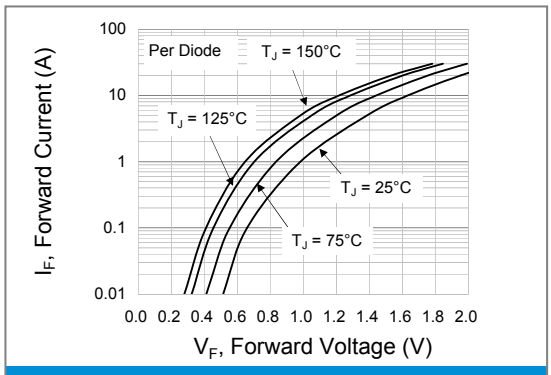

Fig.8 UF2006FCT Typical Forward Characteristics

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Part No_packing code_Version

UF2002FCT_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			

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