PANJIT SEMI CONDUCTOR

UF3006PT

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 600 Volts **CURRENT** 30 Amperes

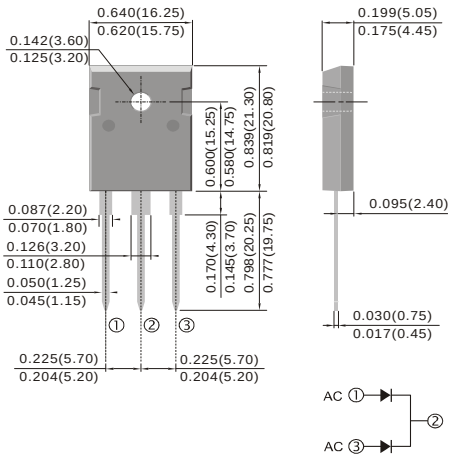
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- 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 2002/95/EC directives

MECHANCAL DATA

- Case: TO-3P molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.2245 ounces, 6.367 grams.

TO-247AD / TO-3P 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	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	600	V
Maximum RMS Voltage		V_{RMS}	420	V
Maximum DC Blocking Voltage		V_{DC}	600	V
Maximum Average Forward Current	per diode	$I_{F(AV)}$	15	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	per diode	I_{FSM}	250	A
Maximum Forward Voltage at 15A	per diode	V_F	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	per diode	I_R	10	μA
Typical Junction Capacitance (Notes 1)		C_J	80	pF
Maximum Reverse Recovery Time (Notes 2)		t_{rr}	90	ns
Typical Thermal Resistance (Notes 3)	per diode	$R_{\theta JA}$	37	°C / W
Typical Thermal Resistance (Notes 4)	per diode	$R_{\theta JC}$	2.5	°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 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
3. Mounted on minimum pad for each lead on board.
4. Mounted on infinite heatsink.

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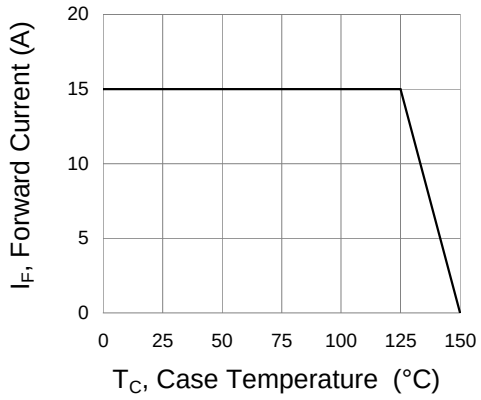

Fig.1 Forward Current Derating Curve

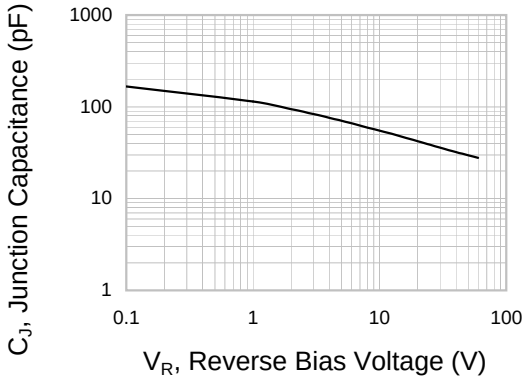

Fig.2 Typical Junction Capacitance

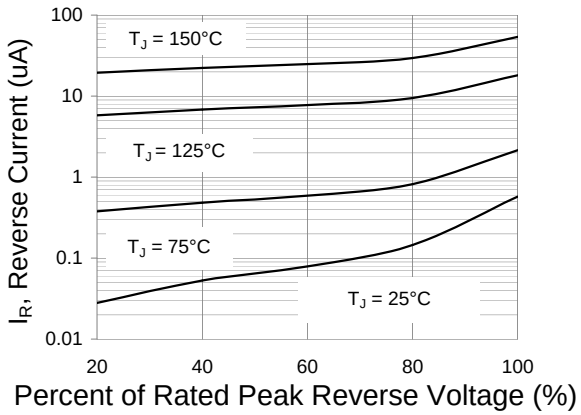

Fig.3 Typical Reverse Characteristics

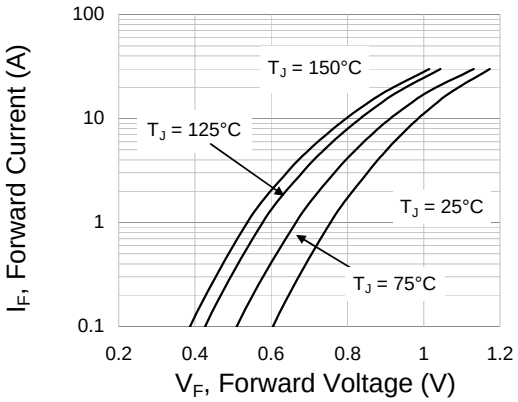

Fig.4 Typical Forward Characteristics

UF3006PT

Part No_packing code_Version

UF3006PT_T0_00001

UF3006PT_T0_10001

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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