

UF3006PT

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 600 Volt **CURRENT** 30 Ampere

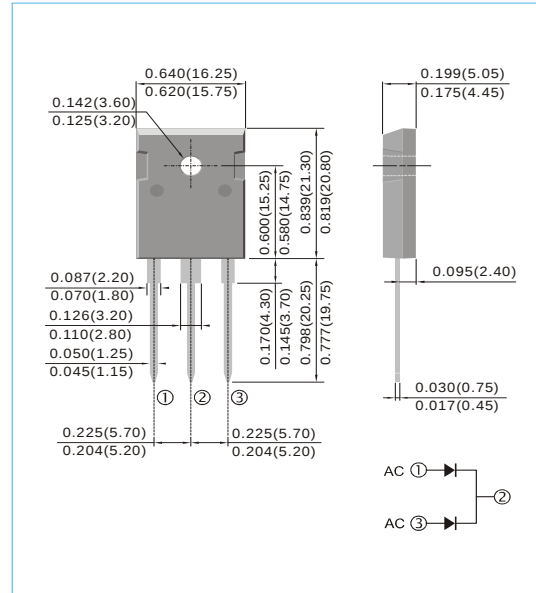
TO-247AD / TO-3P Unit : inch(mm)

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

MECHANICAL 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.



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 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	$^{\circ}C / W$
Typical Thermal Resistance (Notes 4) per diode	$R_{\theta JC}$	2.5	$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^{\circ}C$

NOTES :

- Measured at 1 MHz and applied reverse voltage of 4 VDC.
- Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.
- Mounted on minimum pad for each lead on board.
- Mounted on infinite heatsink.

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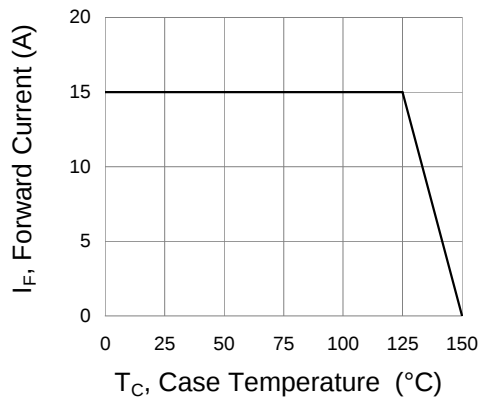


Fig.1 Forward Current Derating Curve

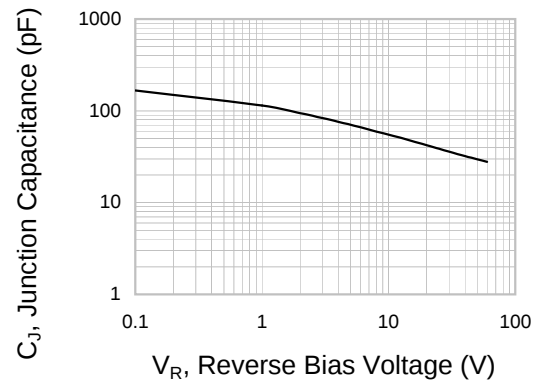


Fig.2 Typical Junction Capacitance

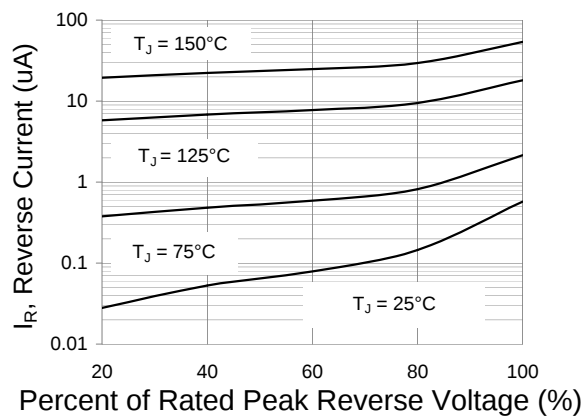


Fig.3 Typical Reverse Characteristics

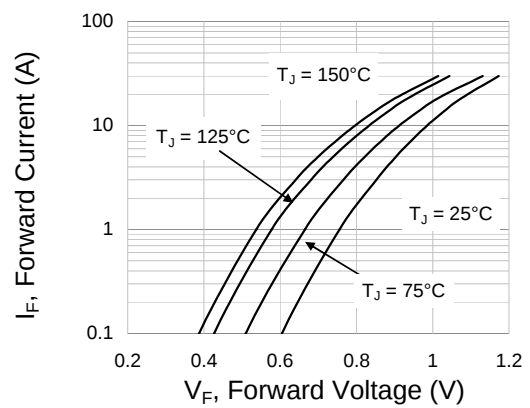


Fig.4 Typical Forward Characteristics

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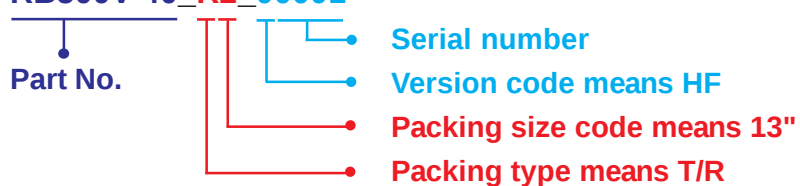
Part No_packing code_Version

UF3006PT_T0_00001

UF3006PT_T0_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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