



# UF3006PT

## ULTRAFAST RECOVERY RECTIFIERS

**VOLTAGE** 600 Volt **CURRENT** 30 Ampere

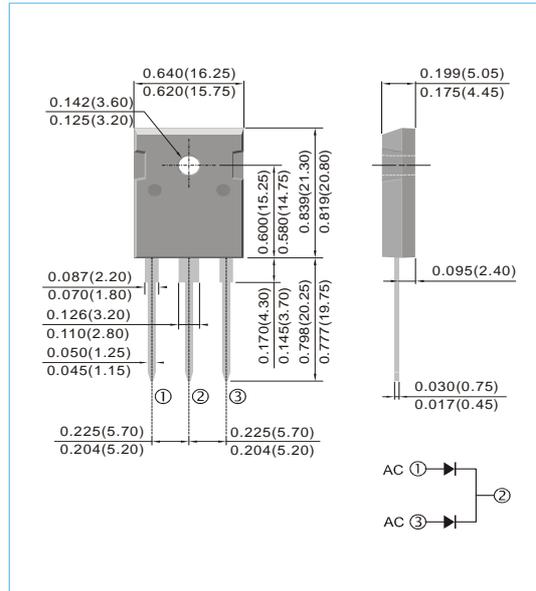
**TO-247AD / TO-3P** Unit : inch(mm)

### 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%

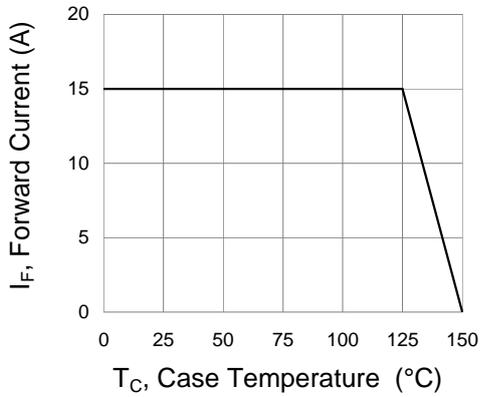
PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	$V_{RMS}$	420	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Maximum Average Forward Current	$I_{F(AV)}$	15	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	250	A
Maximum Forward Voltage at 15A	$V_F$	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	10	$\mu A$
Typical Junction Capacitance (Notes 1)	$C_J$	80	pF
Maximum Reverse Recovery Time (Notes 2)	$t_{rr}$	90	ns
Typical Thermal Resistance (Notes 3)	$R_{\theta JA}$	37	$^{\circ}C / W$
Typical Thermal Resistance (Notes 4)	$R_{\theta JC}$	2.5	$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^{\circ}C$

#### NOTES :

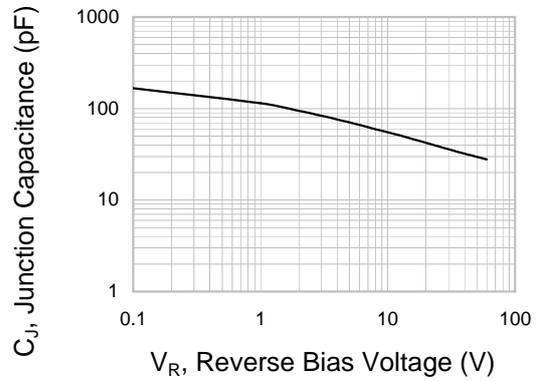
1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .
3. Mounted on minimum pad for each lead on board.
4. Mounted on infinite heatsink.



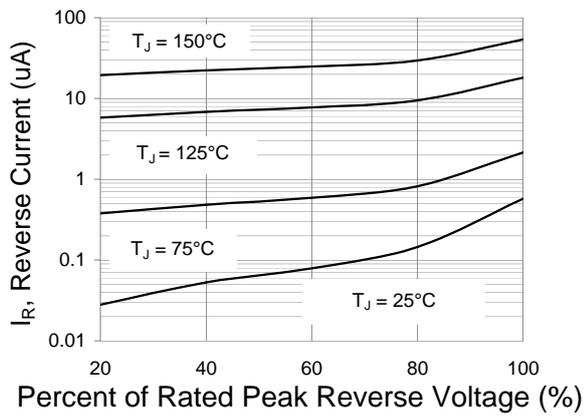
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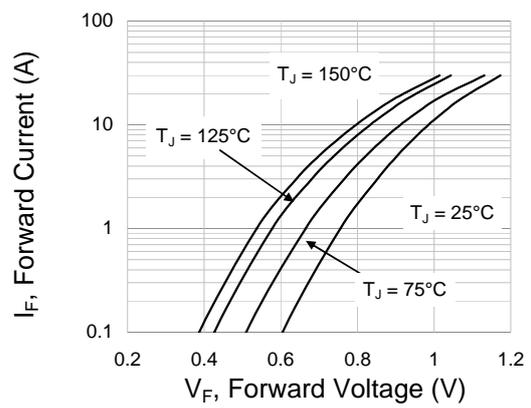
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



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## Part No\_packing code\_Version

UF3006PT\_T0\_00001

UF3006PT\_T0\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> -5 <sup>th</sup> 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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