

Unit : inch(mm)

0.189(4.8)

0.130(3.3)

0.114(2.9)

0.128(3.25) MIN

0.114(2.9)

0.027(0.67)

0.022(0.57)

-2

AC 3

UF1000FCT~UF1006FCT

ULTRAFAST RECOVERY RECTIFIERS

50 to 600 Volt CURRENT 10 Ampere

ITO-220AB

0.406(10.3)

0.381(9.7)

Ø0.134(3.4)

Ø0.118(3.0)/

0.272(6.9)

248(

0.606(15.4) 0.583(14.8)

0.543(13.8) 0.512(13.0)

0.177(4.5) 0.137(3.5)

0.100(2.55)

3

Ż

0.112(2.85) 0.100(2.55)

0.055(1.4)

0.055(1.4)

0.028(0.7) 0.019(0.5)

0.100(2.55)

FEATURES

VOLTAGE

- 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 time, 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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- · Polarity: As marked.
- Standard packaging: Any
- Weight: 0.056 ounces, 1.6 grams

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% | |
|--------------------------------------------|--|
|--------------------------------------------|--|

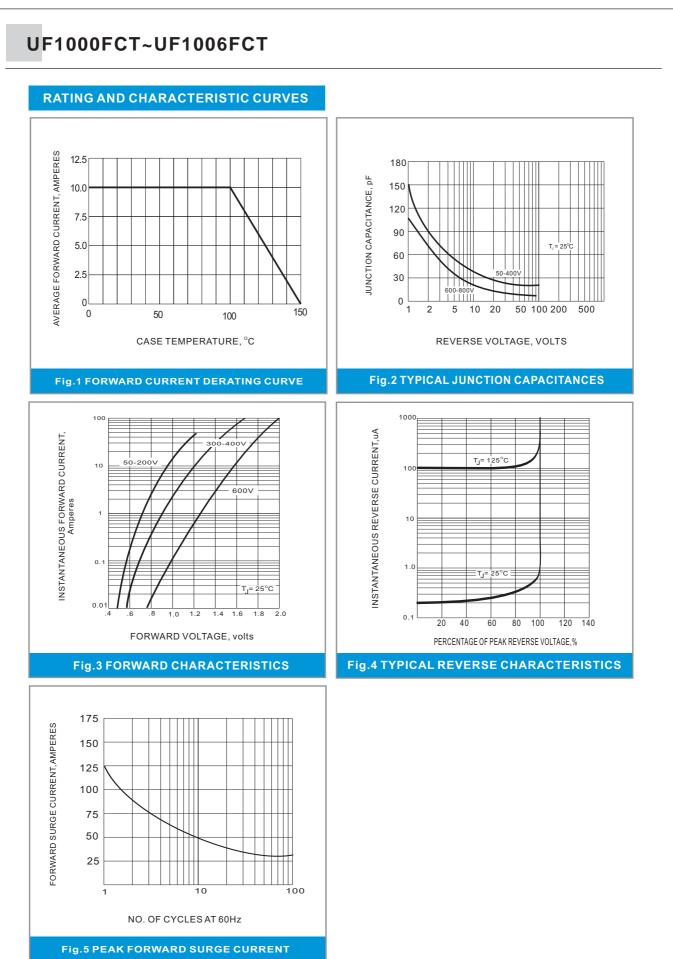
| PARAMETER | SYMBOL | UF1000FCT | UF1001FCT | UF1002FCT | UF1003FCT | UF1004FCT | UF1006FCT | UNITS |
|-------------------------------------------------------------------------------------------------------|---------------------|-------------|-----------|-----------|-----------|-----------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{rrm} | 50 | 100 | 200 | 300 | 400 | 600 | V |
| Maximum RMS Voltage | V _{rms} | 35 | 70 | 140 | 210 | 280 | 420 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 300 | 400 | 600 | V |
| Maximum Average Forward Current | I _{F(AV)} | 10 | | | | | | A |
| Peak Forward Surge Current :8.3ms single half sine- wave superimposed on rated load | I _{fsm} | 125 | | | | | | A |
| Maximum Forward Voltage at 5A | V _F | | 1 | 1.3 1 | | 1.7 | V | |
| Maximum DC Reverse Current T _J =25°C at Rated DC Blocking Voltage T _J =125°C | I _R | 1 500 | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C」 | 60 40 | | | | | рF | |
| Maximum Reverse Recovery Time (Note 2) | t _{rr} | 50 100 | | | | | 100 | ns |
| Typical Thermal Resistance (Note 3) | R _{ejc} | 2 | | | | °C / W | | |
| Operating Junction and Storage Temperature Range | T_,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 case.
- 4. Both Bonding and Chip structure are available.











UF1000FCT~UF1006FCT

Part No_packing code_Version

UF1000FCT_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 | 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) | В | 13" | 2 | | | | | |
| Tube Packing (T/P) | т | 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 | | | | | |





UF1000FCT~UF1006FCT

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