

UG1020FCT

Ultra - Fast Recovery Rectifiers

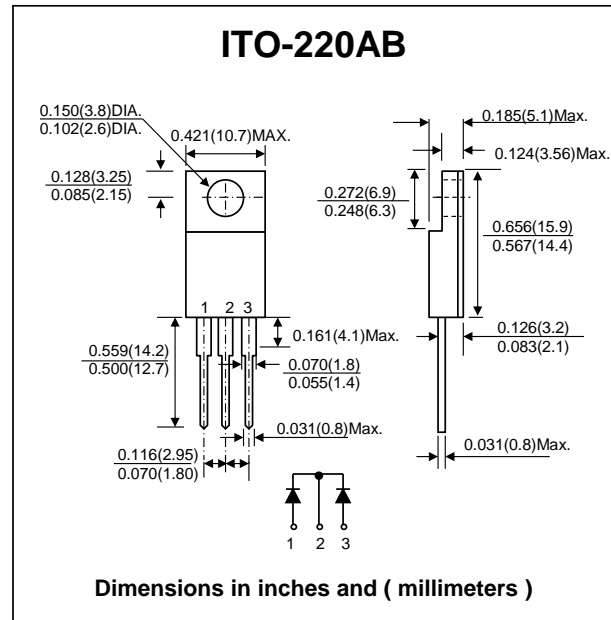
PRV : 200 Volts
Io : 10 Ampere

FEATURES :

- * High frequency operation
- * High surge forward current capability
- * High purity, high temperature epoxy encapsulation for enhanced enhanced mechanical strength and moisture resistance
- * Guard ring for enhanced ruggedness and long term reliability
- * Solder dip 275 °C max. 7 s, per JESD 22-B106
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Package: TO-220AB
 Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- * Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- * Polarity: As marked
- * Weight : 1.46 grams (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta =25°C unless otherwise specified.)

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	V
Maximum RMS Voltage	VRMS	140	V
Maximum DC Blocking Voltage	VDC	200	V
Maximum Average Forward Current at 60Hz , Half-sine wave R-load Tcase see Fig.1	IF(AV)	10	A
Current square time@1mS≤t≤8.3mS Tj=25C Rating/Diode	I ² t	23	A ² S
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	IFSM	75	A
Maximum Instantaneous Forward Voltage per diode at IF = 5 A,	VF	0.975	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	10.0 (Ta = 25°C)	μA
	IR(H)	500 (Ta = 125°C)	μA
Maximum Reverse Recovery Time (IF = 0.5A, IR = 1.0A, Irr = 0.25A)	Trr	25	ns
Thermal resistance between junction and case	Rθj-c	2.0	°C/W
Operating storage and temperature range	TJ, TSTG	- 55 to + 150	°C

RATING AND CHARACTERISTIC CURVES (UG1020FCT)

FIG.1 - MAXIMUM FORWARD CURRENT DERATING CURRENT

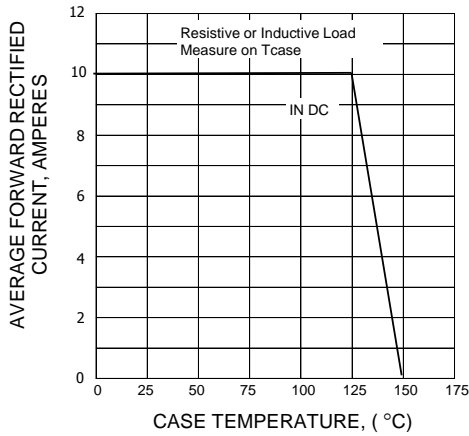


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

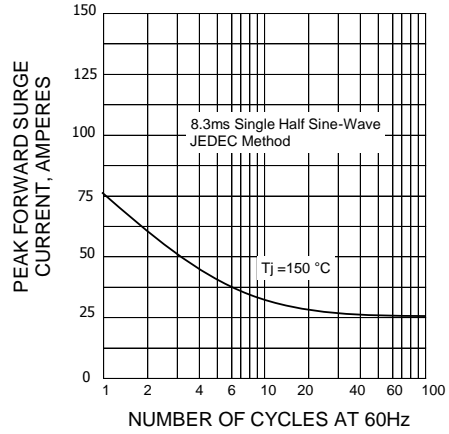


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

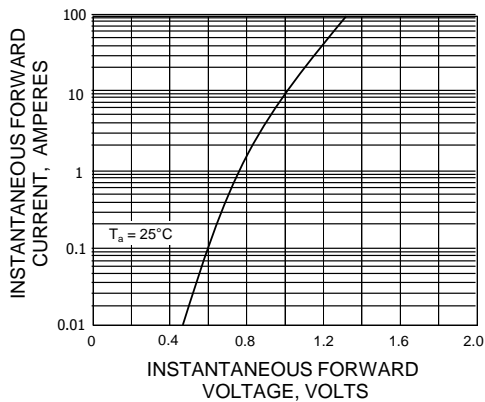


FIG.4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

