

Glass Passivated Ultra Fast Recovery Rectifier

COMCHIP
SMD DIODE SPECIALIST

UF20C01C-G THRU UF20C05C-G

Voltage Range 50 to 600 V

Current 20.0 Ampere

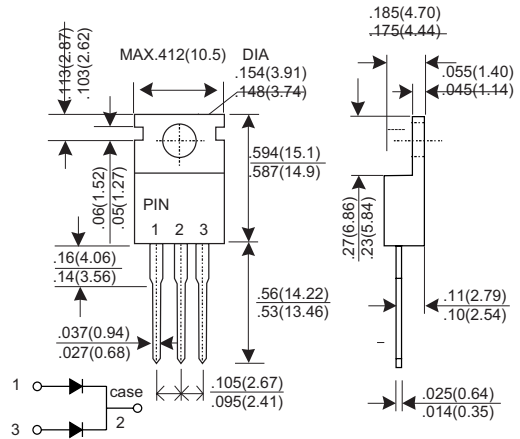
Features

- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Mechanical Data

- * Case: Molded plastic TO-220AB
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202 method 208
- * Polarity: Color band denotes cathode
- * Mounting position: Any
- * Weight: 2.24 grams

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	UF 20C01C-G	UF 20C02C-G	UF 20C03C-G	UF 20C04C-G	UF 20C05C-G	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Rectified Current Tc=125°C	IF(AV)	20.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	125					A
Maximum Instantaneous Forward Voltage @ 10.0 A	VF	1.0		1.3		1.7	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR	10.0			250		uA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75	nS
Typical junction Capacitance (Note 2)	CJ	120			70		pF
Typical Thermal Resistance (Note 3)	RθJA	2.0					°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150					°C

NOTES : (1) Reverse recovery test conditions IF = 0.5A, IR = 1.0A, Irr = 0.25A.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(3) Thermal Resistance junction to case.

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RATINGS AND CHARACTERISTIC CURVES UF20C01C-G THRU UF20C05C-G

FIG.1 - FORWARD CURRENT DERATING CURVE

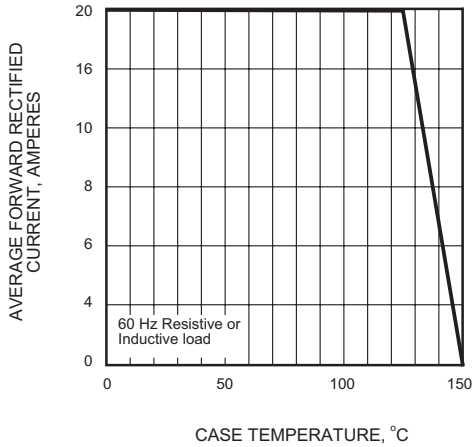


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

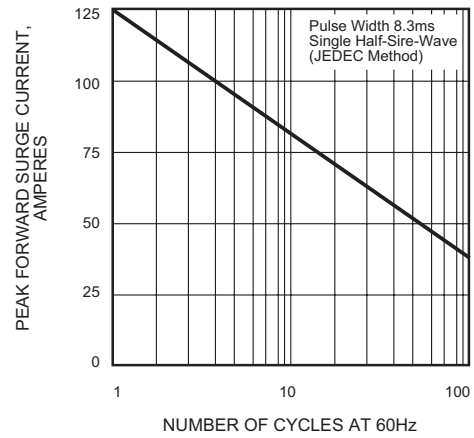


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

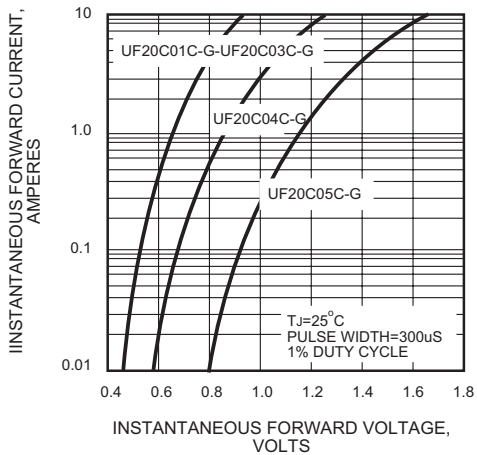


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

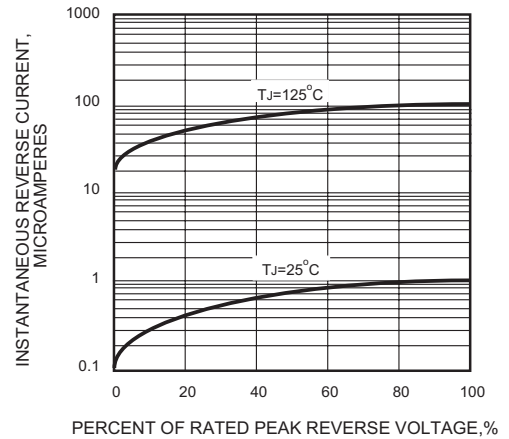


FIG.5 - TYPICAL JUNCTION CAPACITANCE

