



YENYO

UF16C01C THRU UF16C05C

Glass Passivated Ultra Fast Recovery Rectifier

Features

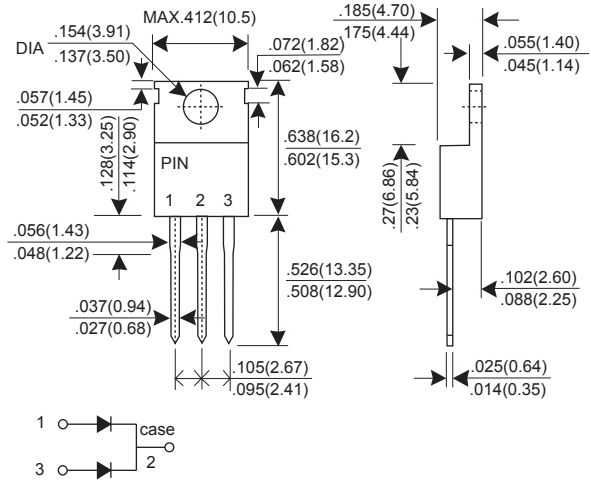
- ★ Fast switching for high efficiency
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Mechanical Data

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

**Voltage Range 50 to 600 V
Current 16.0 Ampere**

TO-220AB



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%.

PARAMETER	SYMBOL	UF 16C01C	UF 16C02C	UF 16C03C	UF 16C04C	UF 16C05C	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=100°C	IF(AV)	16.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	125						A
Maximum Instantaneous Forward Voltage @ 8.0 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					uA	
		250					uA	
Maximum Reverse Recovery Time (Note 1)	Trr	50				75	nS	
Typical junction Capacitance (Note 2)	CJ	65					pF	
Maximum Thermal Resistance (Note 3)	RθJA	15					°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) Thermal Resistance junction to case.
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATINGS AND CHARACTERISTIC CURVES UF16C01C THRU UF16C07C

FIG.1 - FORWARD CURRENT DERATING CURVE

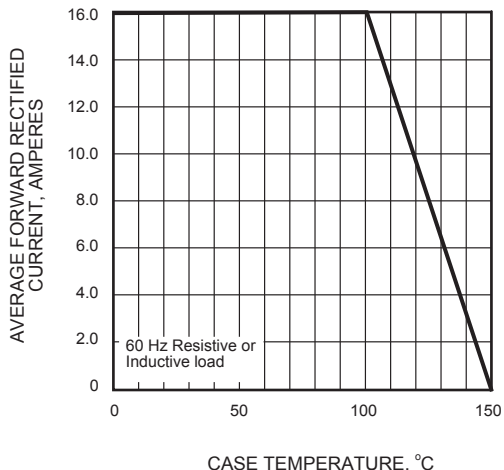


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

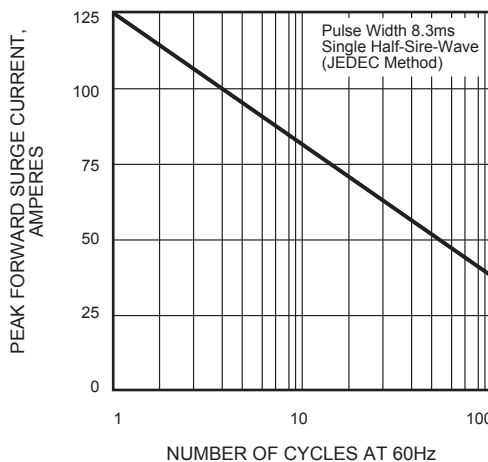


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

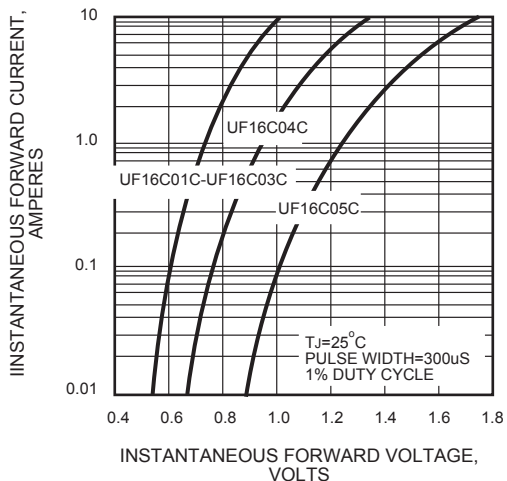


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

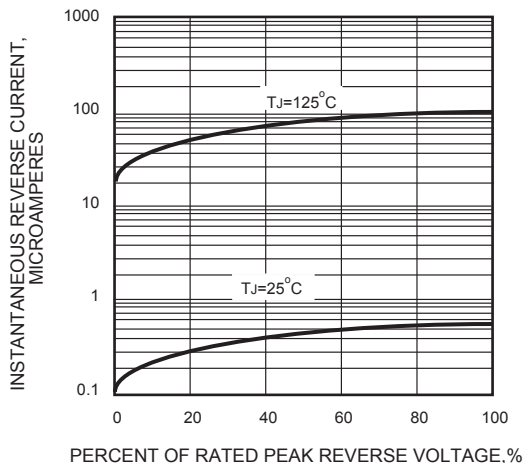


FIG.5 - TYPICAL JUNCTION CAPACITANCE

