



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**UF5400
THRU
UF5408**

TECHNICAL SPECIFICATIONS OF ULTRA FAST RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 3.0 Amperes

FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High speed switching
- * High reliability
- * High current surge

MECHANICAL DATA

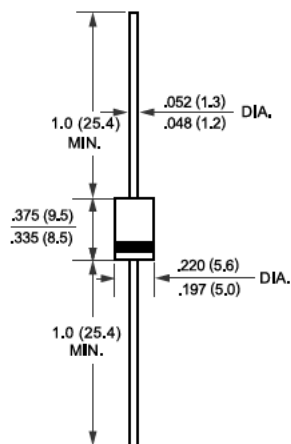
- * Case: Molded plastic
- * Epoxy: UL 94V 0 rate flame retardant
- * Lead: MIL STD 202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.20 grams

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%.



DO-27



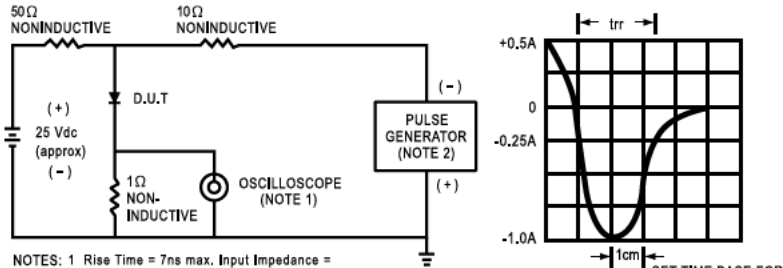
	SYMBOL	UF5400	UF5401	UF5402	UF5404	UF5406	UF5407	UF5408	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vbc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA= 50°C	Io	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150							Amps
Maximum Instantaneous Forward Voltage at 3.0A DC	VF	1.0			1.7				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C	IR	10							uAmps
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at T L = 55°C		150							uAmps
Maximum Reverse Recovery Time (Note 1)	trr	50			75				nSec
Typical Junction Capacitance (Note 2)	CJ	70			50				pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150							°C

NOTES : 1. Test Conditions: IF = 0.5A, IR = 1.0A, IRR = 0.25A
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts



RATING AND CHARACTERISTIC CURVES (UF5400 THRU UF5408)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm, 22pF.
2. Rise Time = 10ns max. Source Impedance = 50 ohms.

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

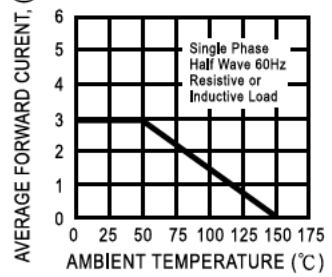


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

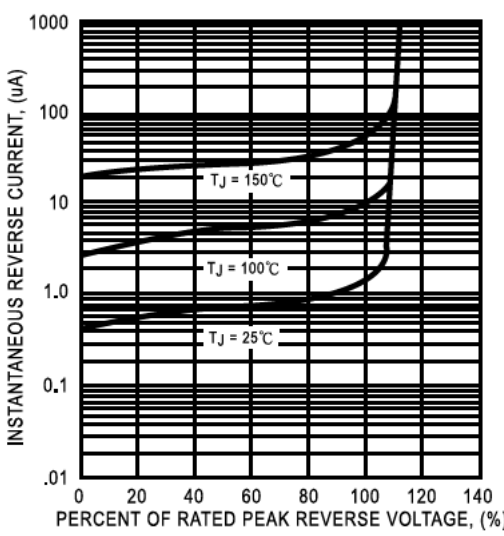


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

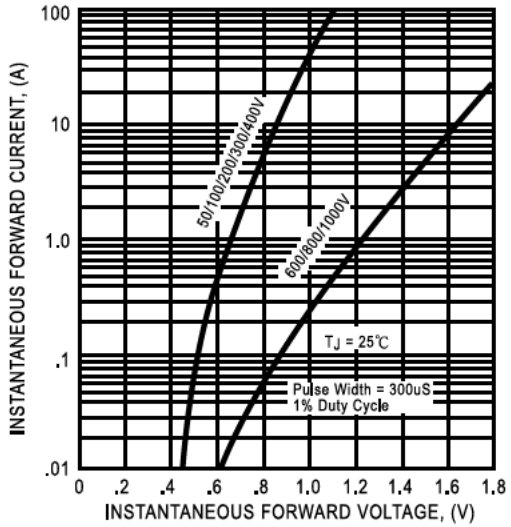


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

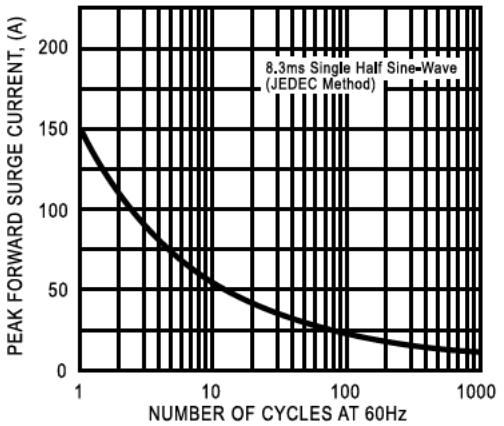


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

