



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 3.0 Amperes

**UF5400PT
THRU
UF5408PT**

FEATURES

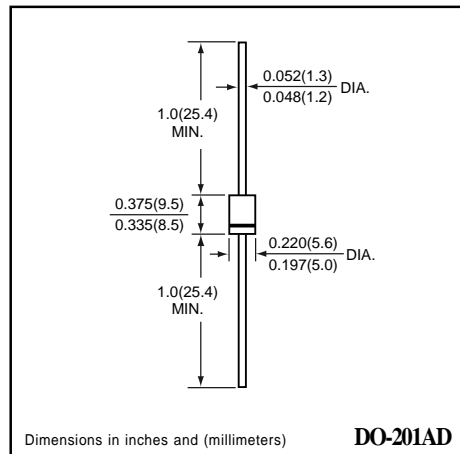
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Glass passivated chip junction
- * Low cost
- * Ultrafast recovery time for high efficiency
- * Low forward voltage, high current capability
- * Low leakage
- * High temperature soldering guaranteed: 260°C, 0.375" (9.5mm) lead length for 10 seconds, 5 lbs. (2.3 kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 1.18 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%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	UF5400PT	UF5401PT	UF5402PT	UF5403PT	UF5404PT	UF5405PT	UF5406PT	UF5407PT	UF5408PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length TA = 55°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
Typical Junction Capacitance (Note 1)	CJ	45									pF
Maximum Thermal Resistance (Note 2)	R # JL	8.5									°C / W
	R # JA	20									°C / W
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150									°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	UF5400PT	UF5401PT	UF5402PT	UF5403PT	UF5404PT	UF5405PT	UF5406PT	UF5407PT	UF5408PT	UNITS	
Maximum Instantaneous Forward Voltage at 3.0 A DC	VF	1.0					1.7					Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	TA = 25°C	10									uAmps	
	TA = 125°C	50									uAmps	
Maximum Reverse Recovery Time (Note 3)	trr	50					75					nSec

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 2. Thermal Resistance from Junction to lead and from junction to ambient with 0.375" (9.5mm) lead length, both leads attached to heatsink
 3. Test Conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A

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RATING CHARACTERISTIC CURVES (UF5400PT THRU UF5408PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

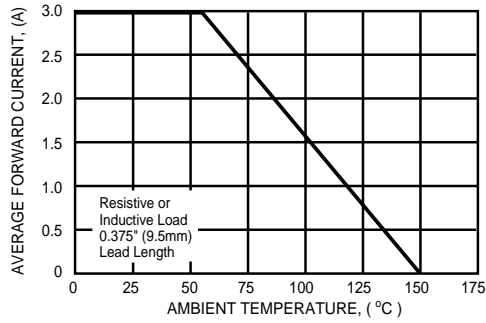


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

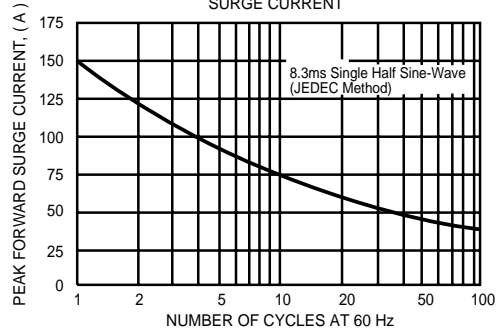


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

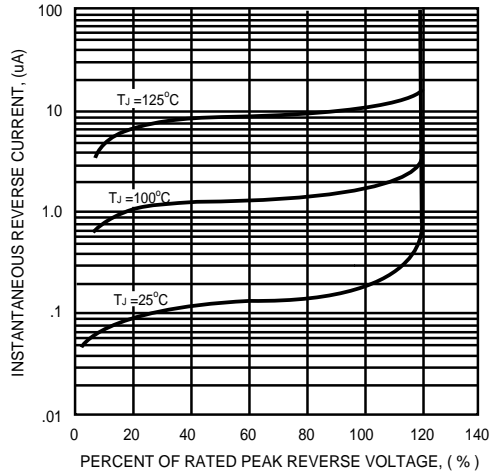


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

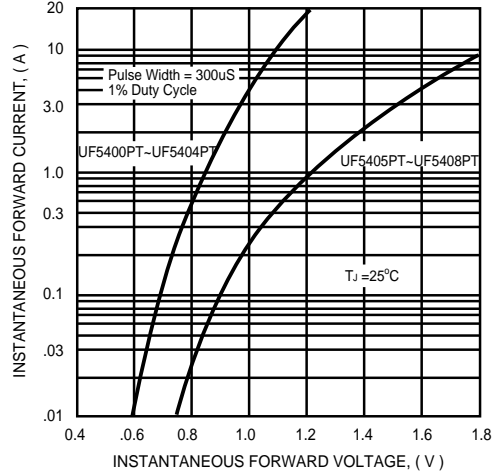


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

