



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

FAST RECOVERY RECTIFIER

VOLTAGE RANGE 50 - 600 Volts CURRENT 8 Amperes

F08A05PT

THRU

F08A60PT

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Dual rectifier construction, positive centertap
- * Glass passivated chip junctions
- * Low power loss
- * Low forward voltage, high current capability
- * High surge current capability
- * Fast recovery times for high efficiency
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

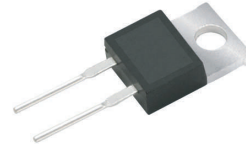
MECHANICAL DATA

Case: JEDEC TO-220A molded plastic

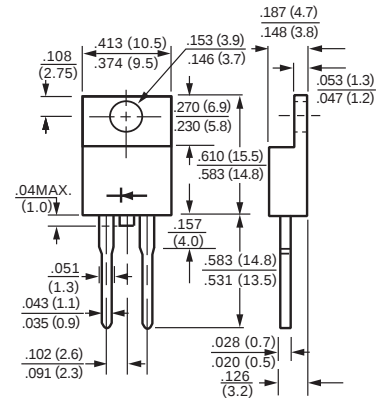
Terminals: Lead solderable per MIL-STD-750, Method 2026

Polarity: As marked

Weight: 1.81 grams (Approximately)



TO-220A



Dimensions in inches and (millimeters)

TO-220A

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

RATINGS	SYMBOL	F08A05PT	F08A10PT	F08A15PT	F08A20PT	F08A30PT	F08A40PT	F08A50PT	F08A60PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	500	600	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	350	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	500	600	Volts
Maximum Average Forward Rectified Current	Io	8.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	125								Amps
Typical Junction capacitance per leg (NOTE 1)	CJ	120				70				pF
Typical thermal resistance (NOTE 2)	R θJC	5.0								°C / W
Operating and Storage Temperature Range	TJ, TSTG	-65 to +175								°C

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

CHARACTERISTICS		SYMBOL	F08A05PT	F08A10PT	F08A15PT	F08A20PT	F08A30PT	F08A40PT	F08A50PT	F08A60PT	UNITS
Maximum Instantaneous Forward Voltage at 8.0 A DC		V _F	0.975				1.30		1.50		Volts
Maximum DC reverse current at rated DC blocking voltage per leg	T _C = 25°C	I _R	10.0								uAmps
	T _C = 100°C		500								
Maximum reverse recovery time (NOTE 3) per leg		trr	150						250		nS

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Thermal resistance from junction to case per leg mounted on heatsink
3. Reverse recovery test conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A.
4. Suffix " P " = Case Positive, Suffix " R " = Case Negative.

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RATING CHARACTERISTIC CURVES (F08A05PT THRU F08A60PT)

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

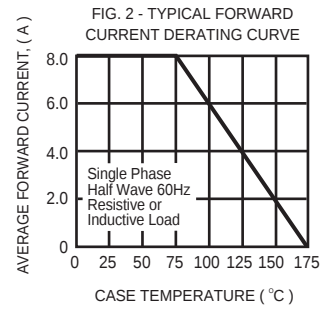
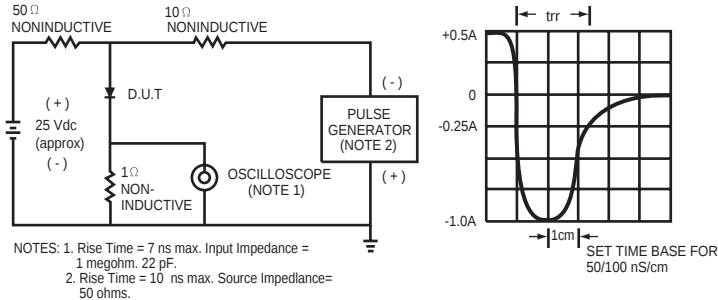


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

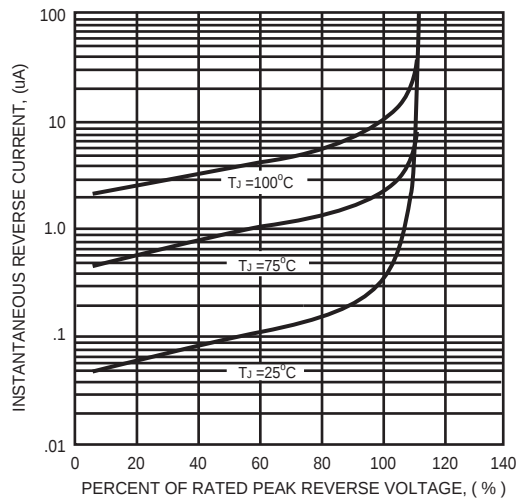


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

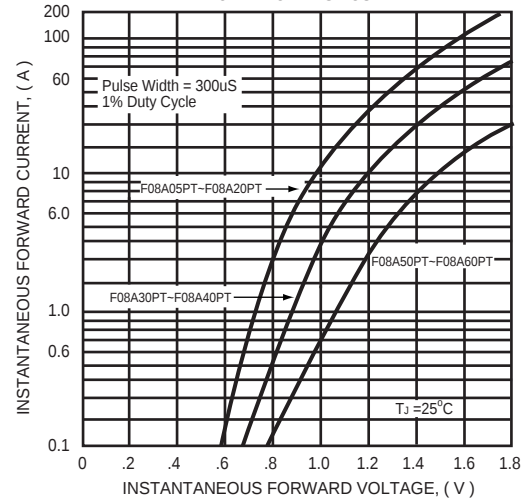


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

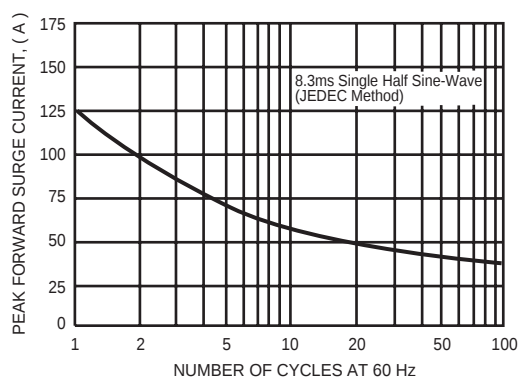


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

