



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

	RECTIFIER SPECIALISTS	FR3A THRU FR3K
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TECHNICAL SPECIFICATIONS OF SURFACE MOUNT FAST RECOVERY RECTIFIER
VOLTAGE RANGE - 50 to 800 Volts **CURRENT - 3.0 Amperes**

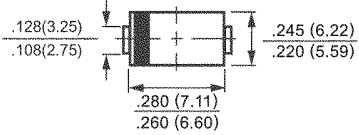
FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Glass passivated junction

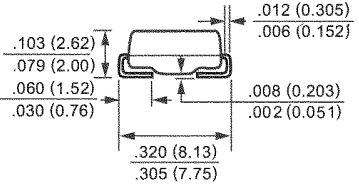
MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.24 gram


SMC (DO-214AB)



Top view dimensions: .128(3.25), .108(2.75), .280(7.11), .260(6.60), .245(6.22), .220(5.59)



Side view dimensions: .103(2.62), .079(2.00), .060(1.52), .030(0.76), .012(0.305), .006(0.152), .008(0.203), .002(0.051), .320(8.13), .305(7.75)

Dimensions in inches and (millimeters)

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%.

	SYMBOL	FR3A	FR3B	FR3D	FR3G	FR3J	FR3K	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	Volts
Maximum Average Forward Rectified Current TA = 75°C	IO	3.0						Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100						Amps
Maximum Forward Voltage at 3.0A DC	VF	1.2						Volts
Maximum DC Average Reverse Current at Rated DC Blocking Voltage	IR	10						uAmps
		@TA = 125°C						
Maximum Reverse Recovery Time (Note 3)	trr	150		250	500		nSec	
Typical Thermal Resistance (Note 2)	RθJL	10						°C/W
Typical Junction Capacitance (Note 1)	Cj	60						pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175						°C

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC
 2. Thermal Resistance (Junction to Ambient), 0.4x0.4in² (10.0X10.0mm²) copper pads to each terminal.
 3. Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A.



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RATING AND CHARACTERISTIC CURVES (FR3A THRU FR3K)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

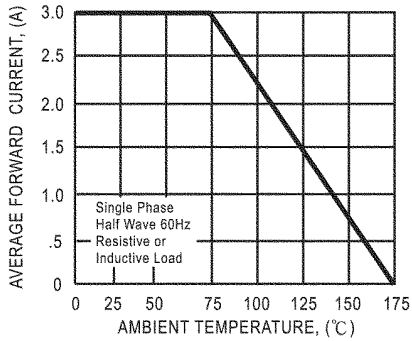


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

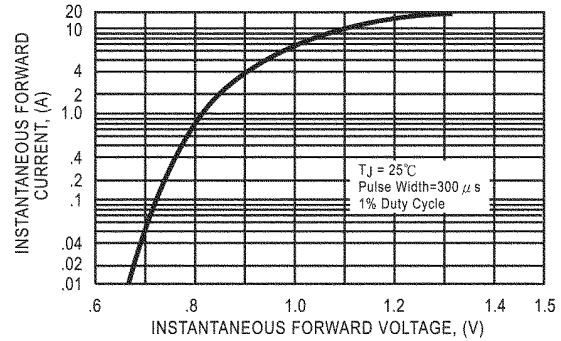


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

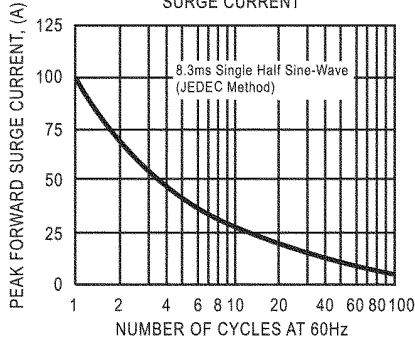


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

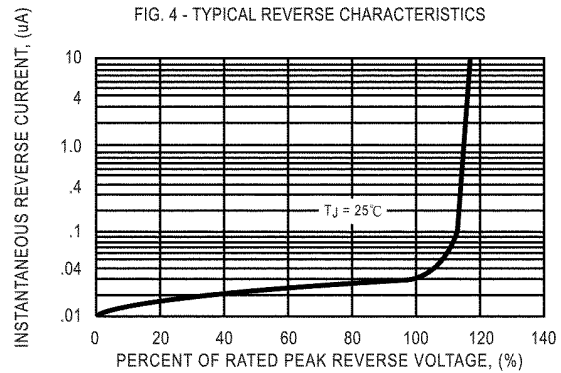


FIG. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

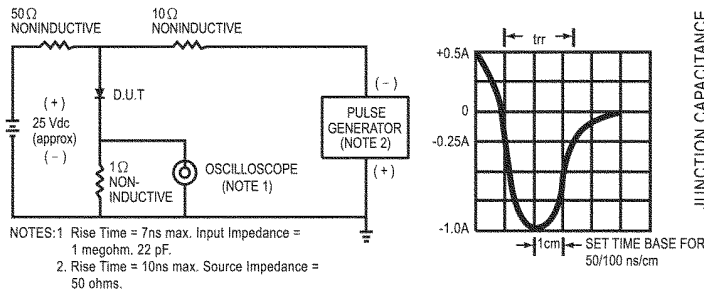


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

