

**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

**ER1A
THRU
ER1G****TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SUPER FAST RECTIFIER****VOLTAGE RANGE - 50 to 400 Volts****CURRENT - 1.0 Ampere****FEATURES**

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

MECHANICAL DATA

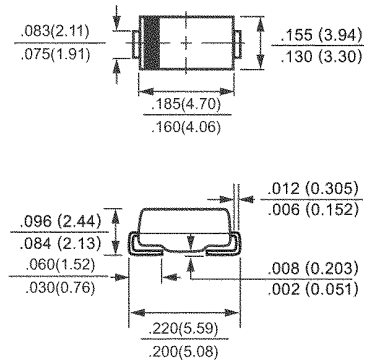
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per
MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.093 gram

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%.

**SMB (DO-214AA)**

Dimensions in inches and (millimeters)

		SYMBOL	ER1A	ER1B	ER1C	ER1D	ER1E	ER1G	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 at TA = 75°C		Io	1.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	30						Amps
Maximum Instantaneous Forward Voltage at 1.0A DC		VF	0.95			1.25			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	IR	5.0						uAmps
	@ TA = 100°C		100						
Maximum Reverse Recovery Time (Note 3)		trr	35						nSec
Typical Thermal resistance(Note 2)		RθJL	20						°C/W
Typical Junction Capacitance (Note 1)		CJ	30						pF
Operating and Storage Temperature Range		TJ,TSTG	-65 to + 175						°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2. Thermal Resistance (Junction to Ambient), 0.2x0.2in²(5X5mm²) copper pads to each terminal.3. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.



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RATING AND CHARACTERISTIC CURVES (ER1A THRU ER1G)

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

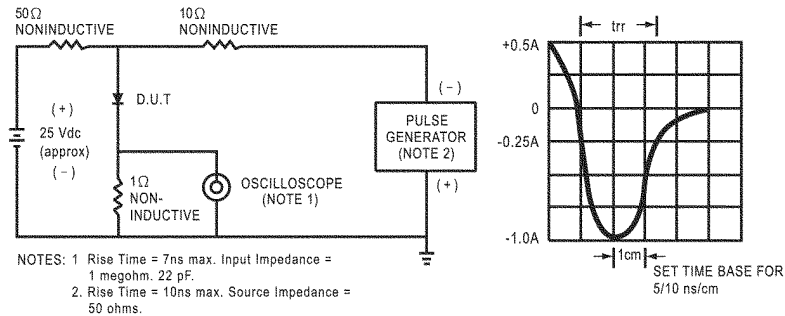


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

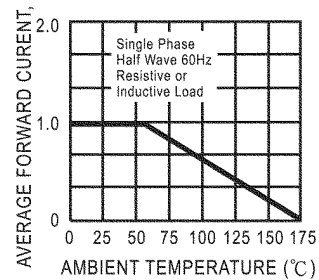


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

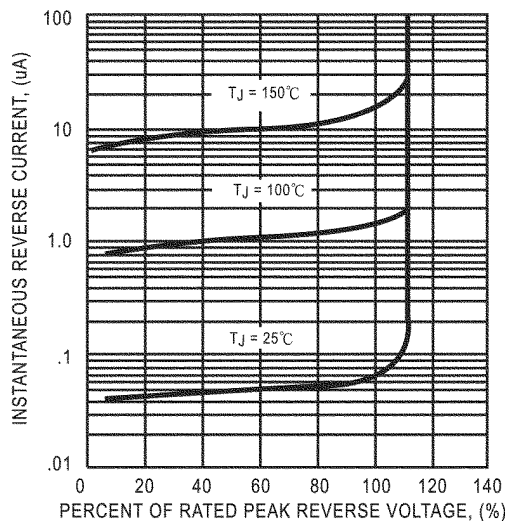


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

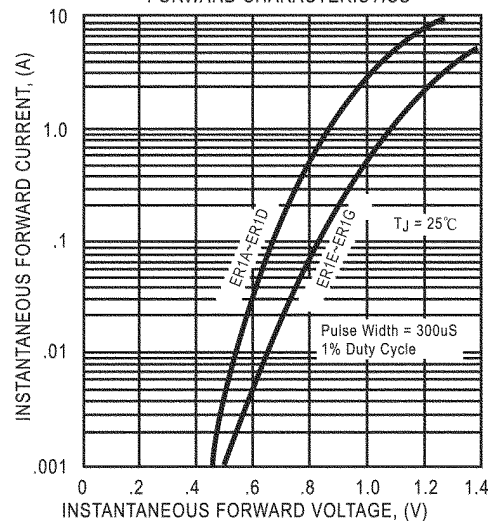


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

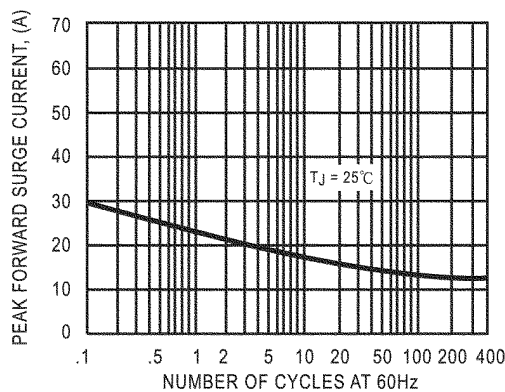


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

