



YEA SHIN TECHNOLOGY CO., LTD

EK3A THRU EK3J

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE - 50 to 600 Volts CURRENT - 3.0 Ampere



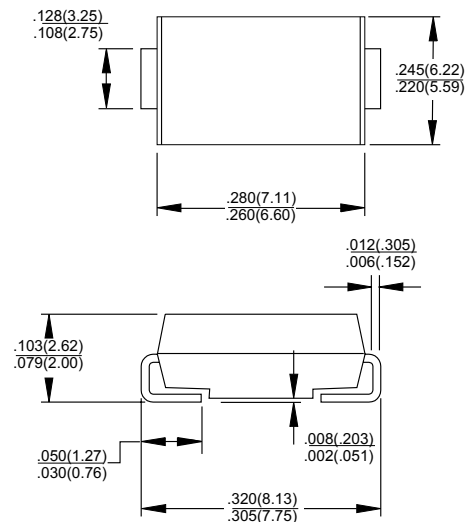
FEATURES

- For surface mounted applications
- High temperature metallurgically bonded-no compression contacts as found in other diode-constructed rectifiers
- Glass passivated junction
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band

SMC/DO-214AB Unit:inch(mm)



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%.

	EK3A	EK3B	EK3C	EK3D	EK3E	EK3G	EK3J	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	150	200	300	400	600	V
Maximum RMS Voltage	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current, at TL=75	3.0							A
Peak Forward Surge Current 8.3ms single half sinewave superimposed on rated load(JEDEC method)	100.0							A
Maximum Instantaneous Forward Voltage at 3.0A	0.95				1.25	1.70		V
Maximum DC Reverse Current TA=25	5.0							μA
At Rated DC Blocking Voltage TA=100	200							μA
Maximum Reverse Recovery Time (Note 1)	35.0							nS
Typical Junction capacitance (Note 2)	45.0							pF
Typical Thermal Resistance (Note 3) RθJA	16							/W
Operating and Storage Temperature Range TJ,TSTG	-55 to +150							

NOTES:

- Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, Irr=0.25A
- Measured at 1 MHz and applied Vr = 4.0 volts.
- 8.0 mm² (.013mm thick) land areas.

DEVICE CHARACTERISTICS

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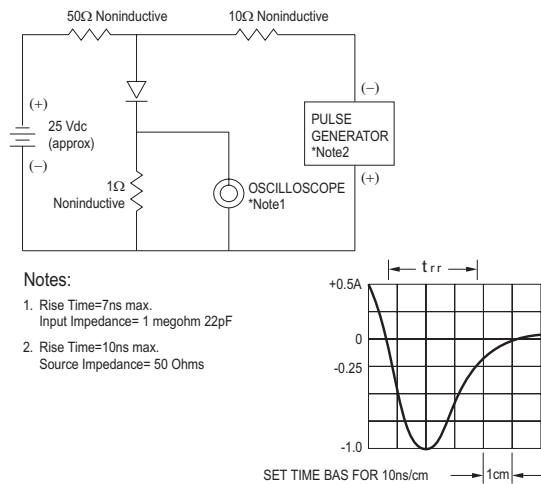


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

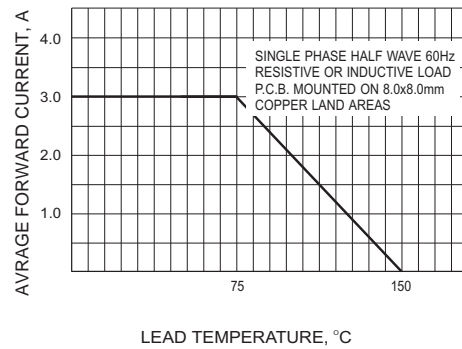


Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

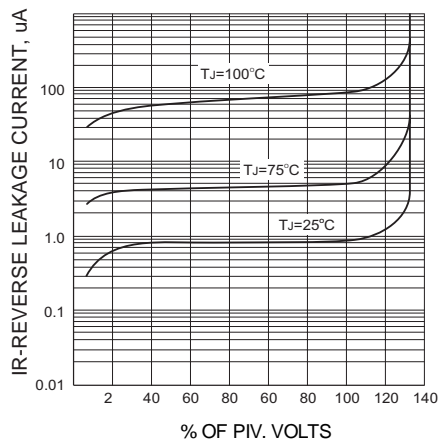


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

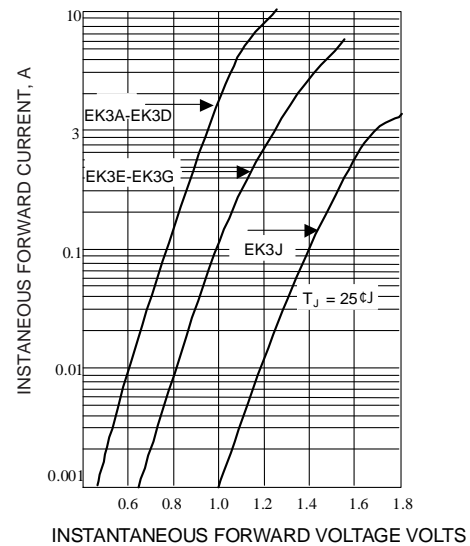


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

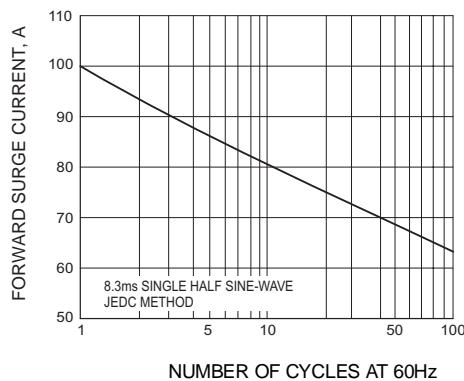


Fig. 5-MAXIMUM NON-REPETITIVE SURGE CURRENT

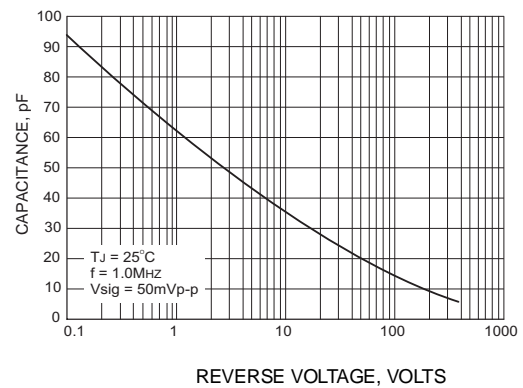


Fig. 6-TYPICAL JUNCTION CAPACITANCE