



## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Super fast recovery time for high speed switching

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.21 grams

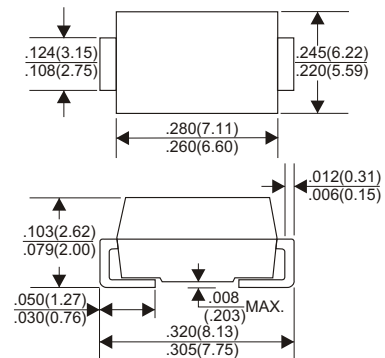
## VOLTAGE RANGE

600 Volts

## CURRENT

3.0 Ampere

### DO-214AB(SMC)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	ES3J	UNITS
Maximum Recurrent Peak Reverse Voltage	600	V
Maximum RMS Voltage	420	V
Maximum DC Blocking Voltage	600	V
Maximum Average Forward Rectified Current at T <sub>L</sub> =100°C	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100	A
Maximum Instantaneous Forward Voltage at 3.0A	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	10 500	μA
Maximum Reverse Recovery Time (Note 1)	35	nS
Typical Junction Capacitance (Note 2)	45	pF
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>	-65 — +150	°C

### NOTES:

- Reverse Recovery Time test condition: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A
- Measured at 1MHz and applied reverse voltage of 4.0V D.C.

# RATING AND CHARACTERISTIC CURVES (ES3J)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

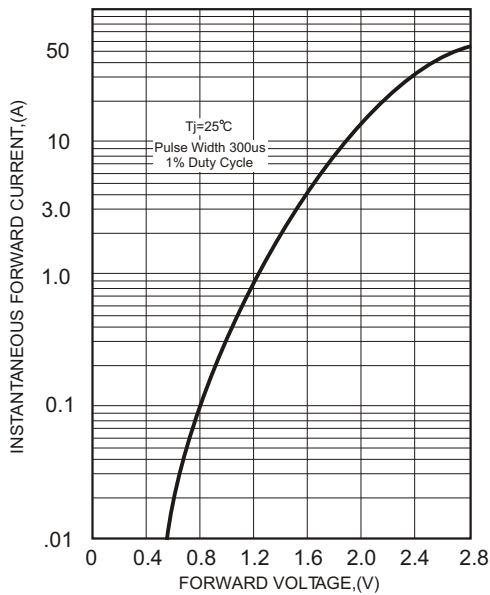


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

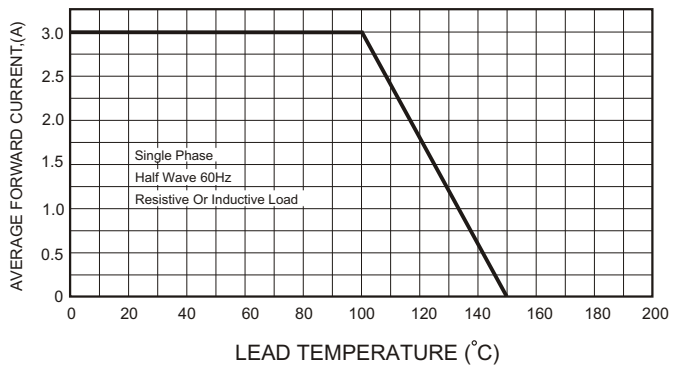


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

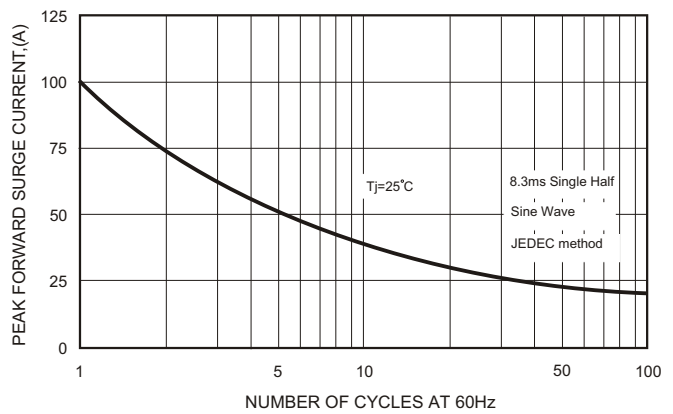
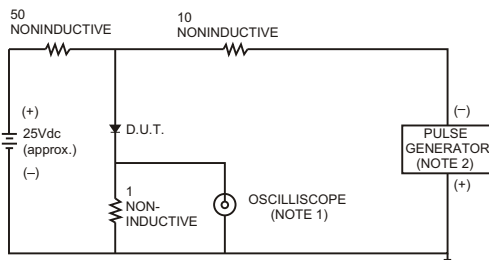


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



- NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.  
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

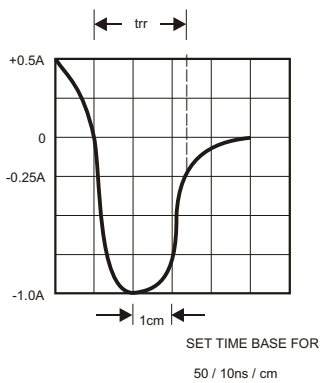


FIG.5-TYPICAL JUNCTION CAPACITANCE

