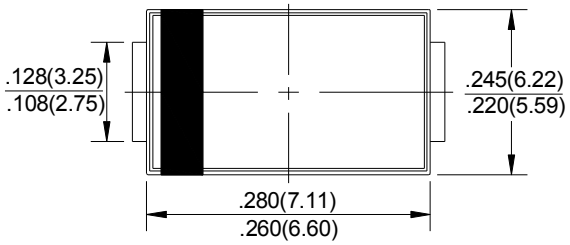
CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 600 Volts

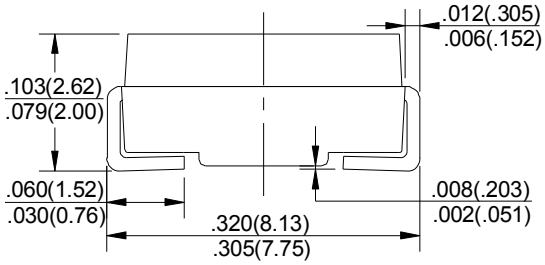
ES3AC THRU ES3JC

FEATURES

- Plastic package has underwrites laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Built-in strain relief,
- Suoer Fast switching speed for high efficiency
- High temperature soldering guaranteed: 260 /10 seconds

DO-214AB/SMC





Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDED DO-214AB transfer molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750
- Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.007 ounce, 0.25 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	ES3A	ES3B	ES3C	ES3D	ES3E	ES3G	ES3J	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	Volts
Maximum Average Forward Rectified Current at T_L=100	$I_{(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100							Amps
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	0.95			1.25	1.7			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element, T_A = 25	I_R	5.0							A
Maximum DC Reverse Current at rated DC Blocking Voltage per element, T_A = 125	I_R	300							A
Typical Reverse Recovery Time Test conditions I_F =0.5A, I_R =1.0A, I_{RR} =0.25A	t_{rr}	35							nS
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	45				30			pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	55							/W
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	17							/W
Operating Junction Temperature Range	T_J	(-55 to +150)							
Storage Temperature Range	T_{STG}	(-55 to +150)							

Notes:
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.3"×0.3"(8.0mm × 8.0mm) copper pad areas.

CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 600 Volts

ES3AC THRU ES3JC

RATING AND CHRACTERISTIC CURVES ES3A Thru ES3J

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

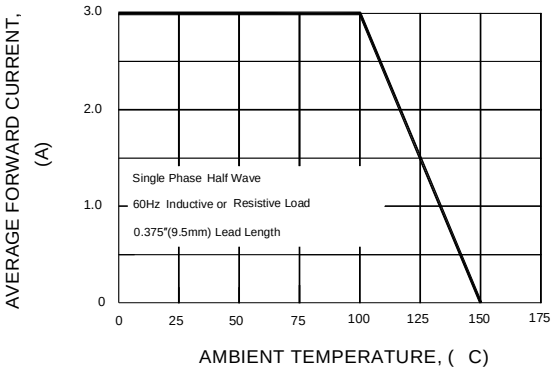


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

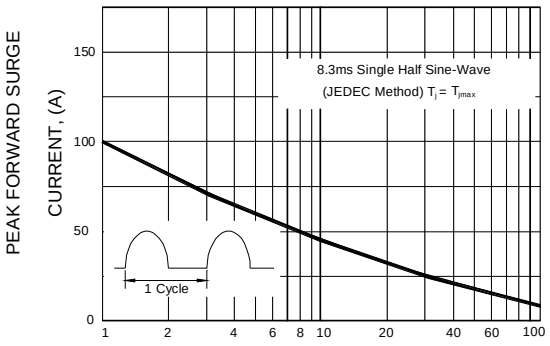


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

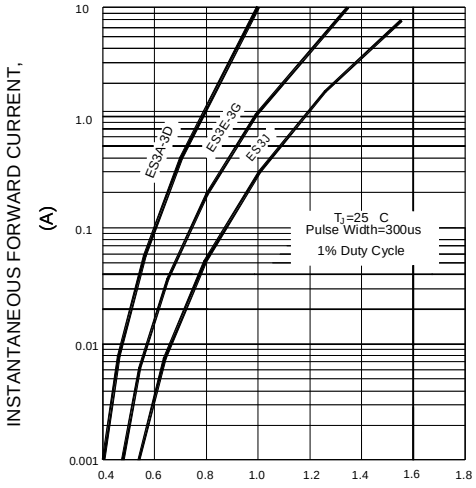


FIG.4-TYPICAL REVERSE CHARACTERISTICS

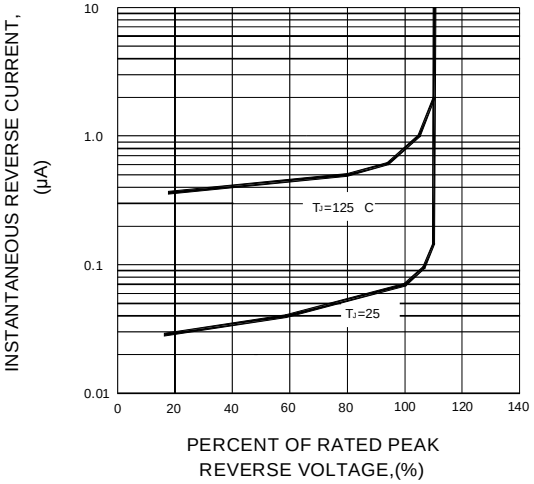
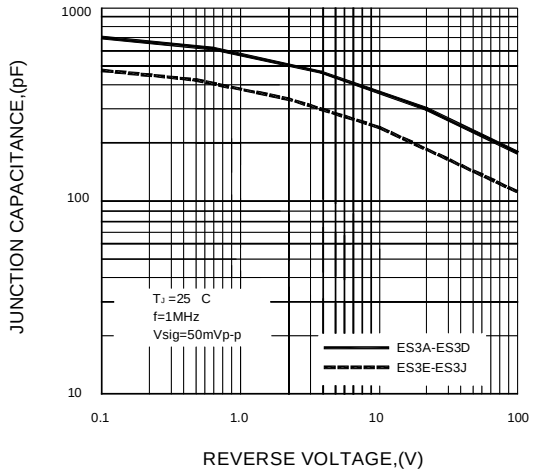
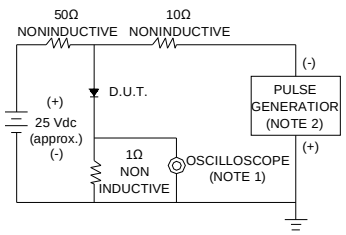
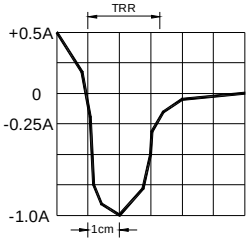


FIG.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC





SET TIME BASE FOR 50/100ns/cm

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