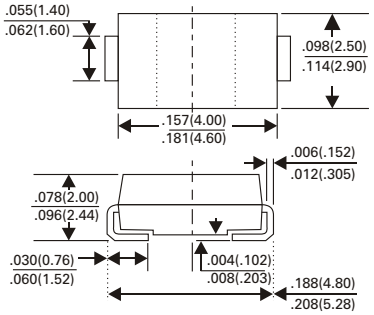
ES2AA thru ES2JA

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE - 50 TO 600 VOLTS CURRENT - 2.0 AMPERES

SMA/DO-214AC



Dimensions in inches and (millimeters)

FEATURES

- For surface mount applications
- Low profile package
- Buit-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- High temperature soldering：260°C/10seconds at terminals
- Pb free product are available：99% Sn above can meet RoHS Environment substance directive request

MECHANICAL DATA

Case：JEDEC DO-214AC molded plastic
Terminals：Solder plated, solderable per MIL-STD-750, Method 2026
Polarity：Indicated by cathode band
Standard packaging：16mm tape (EIA-481)
Weight：0.093grams

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2HA	ES2JA	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	Volts
Maximum Average Forward Rectified Current @ T_L =100°C	$I_{(AV)}$	2.0								Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50								Amps
Maximum Instantaneoue Forward Voltage at 2.0A	V_F	0.95				1.3		1.7		Volts
Maximum DC Reverse Current @T_J=25°C at Rated DC Blocking Voltage @T_J=100°C	I_R	10 350								μA
Maximum Reverse Recovery Time (NOTE 1)	T_{RR}	35								nS
Typical Junction Capacitance (NOTE 2)	C_J	25				20				pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JA}$ $R_{\theta JL}$	75 20								°C / W
Operating and Storage Temperature Range	T_J T_{STG}	-55 to +150								°C

NOTES：
1. Rverse Recovery Test Condibons I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and applied reverse Voltag of 4.0VDC
3. Units Mounted on P.C.B.0.2″ X0.2″ (5mmX5mm) Pad Areas

SURFACE MOUNT SUPERFAST RECTIFIER

RATING AND CHARACTERISTICS CURVES ES2AA THRU ES2JA

FIG.1-MAXIMU MFO RWARDCURREN TDER ATING CURVE

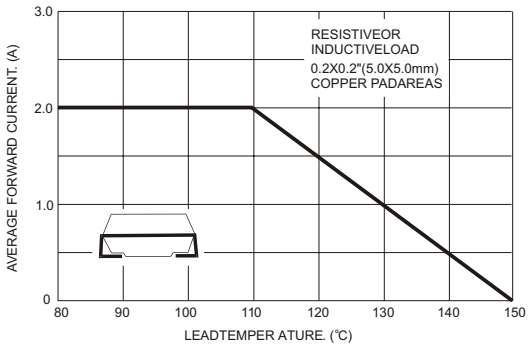


FIG.2-TYPICA LREVERS ECHARACTERISTICS

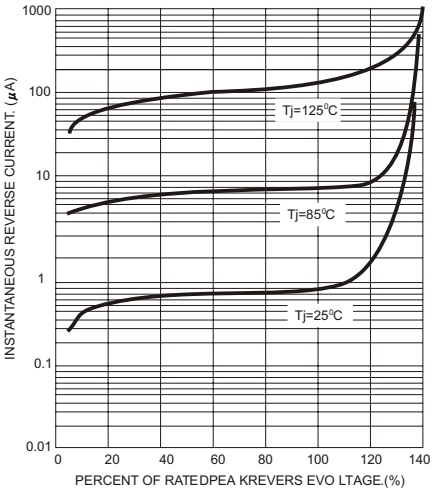


FIG.3-MAXIMU MNON-REPETITIV EPEA KFO RWARD SURGECURRENT

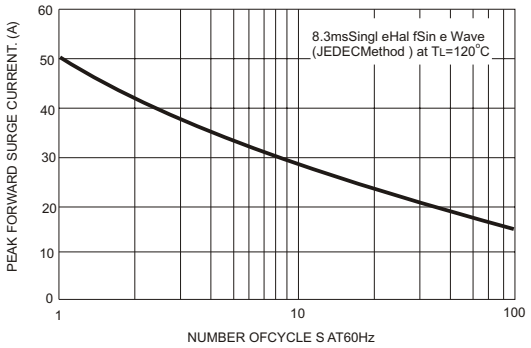


FIG.4-TYPICA LJUNCTIO NCA PACITANCE

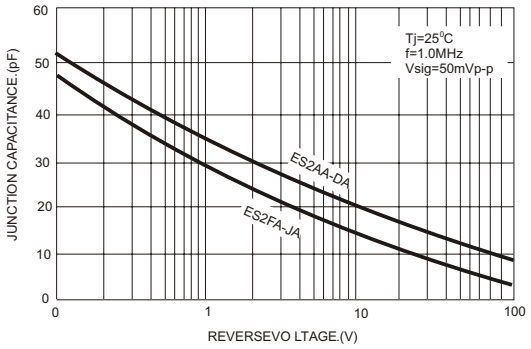


FIG.5-TYPICA LINS TANTANEOUS FORWARDCHARACTERISTICS

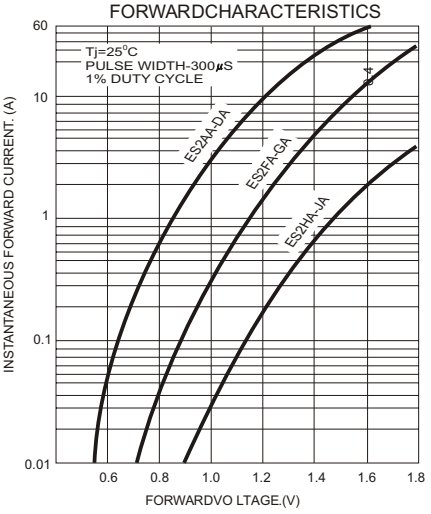
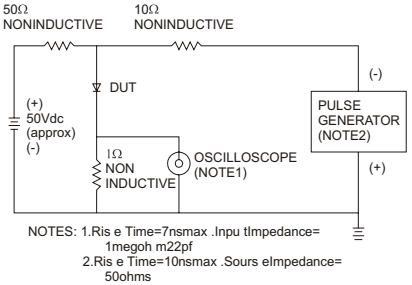


FIG.6-REVERS ERECOVE RYTIM ECHARACTERISTI CAN DTES TCIRCUI TDIAGRAM



NOTES: 1.Ris e Time=7nsmax .Inpu tImpedance= 1megoh m22pf
2.Ris e Time=10nsmax .Sours eImpedance= 50ohms