

ES2A THRU ES2J

SURFACE MOUNT GLASS PASSIVATED JUNCTION SUPER FAST RECOVERY RECTIFIER

Reverse Voltage: 50 to 600 Volts
Forward Current: 2.0 Ampere

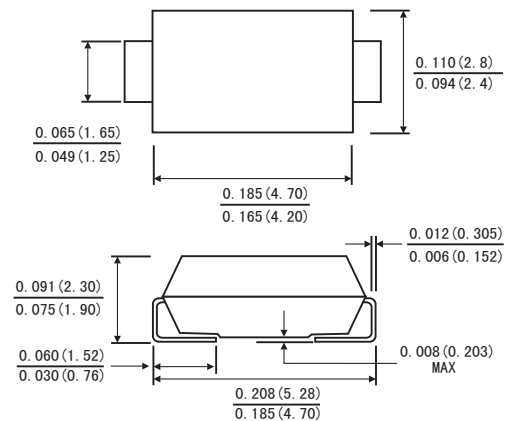
FEATURES

- Glass passivated cavity-free junction
- Ideal for surface mount automotive applications
- Ultrafast recovery time for high efficiency
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Lead (Pb)-free component
- Component in accordance to RoHS 2011/65/EU
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002ounce, 0.064 gram

SMA(DO-214AC)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	ES2					Units
		A	B	D	G	J	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current at Ta=50°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 Instantaneous Forward Voltage at 2.0 A	V _F	0.95			1.3	1.7	Volts
Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A =25°C	5					μA
	T _A =125°C	100					
Maximum Reverse Recovery Time(Note1)	T _{rr}	35					ns
Typical Junction Capacitance(Note2)	C _J	25					pF
Typical Thermal Resistance(Note3)	R _{θJA}	90					°C/W
	R _{θJL}	30					
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150					°C

RATINGS AND CHARACTERISTIC CURVES ES2A THRU ES2M

FIG.1- FORWARD CURRENT DERATING CURVE

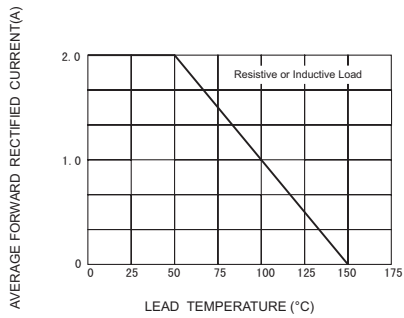


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

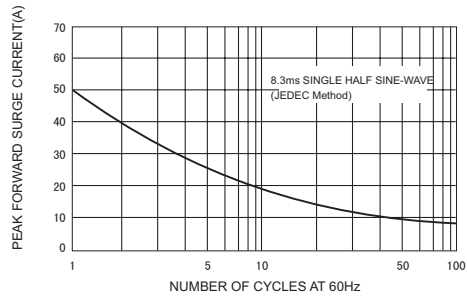


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

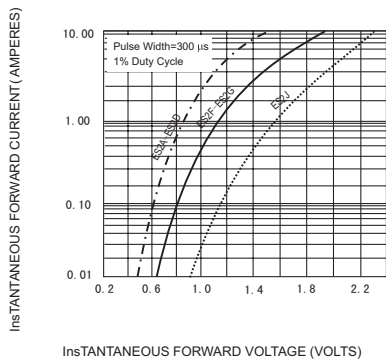


FIG.4-TYPICAL REVERSE CHARACTERISTICS

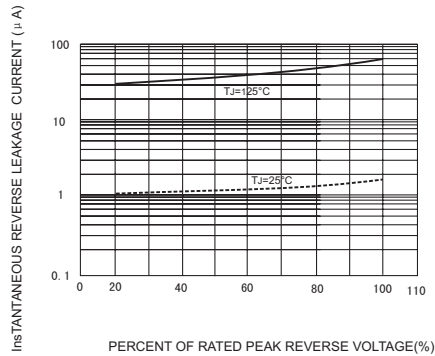


FIG.5-TYPICAL JUNCTION CAPACITANCE

