

SURFACE MOUNT SUPERFAST RECOVERY RECTIFIER

REVERSE VOLTAGE: 50 to 1000VOLTS

FORWARD CURRENT: 1.0 AMPERE

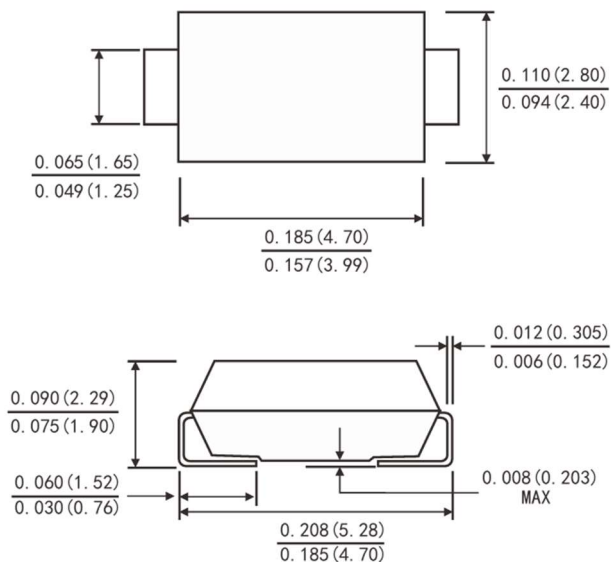
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass Passivated cavity-free junction
- Ideal for surface mounted applications
- Ultrafast recovery time for high efficiency
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

Mechanical Data

- Case: JEDEC DO-214AC(SMA)
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Reel: 5000Pcs

SMA(DO-214AC)



Dimensions in inches and (millimeters)

Maximum Ratings 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%.

Parameters / Marking Code	Symbols	ES1							Units
		A	B	D	G	J	K	M	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at Ta=110°C	I _(AV)	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V _F	0.95		1.25		1.7		Volts	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5							μA
		100							
Maximum Reverse Recovery Time(Note1)	T _{rr}	35				100		ns	
Typical Junction Capacitance(Note2)	C _J	15							pF
Typical Thermal Resistance	R _{θJA}	90							°C/W
	R _{θJC}	30							
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to+150							°C

NOTES:

1. Test Conditions: I_F=0.5A, I_R=1A, I_{RR}=0.25A
2. Measured at 1MHZ and applied reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

FIG.1- FORWARD CURRENT DERATING CURVE

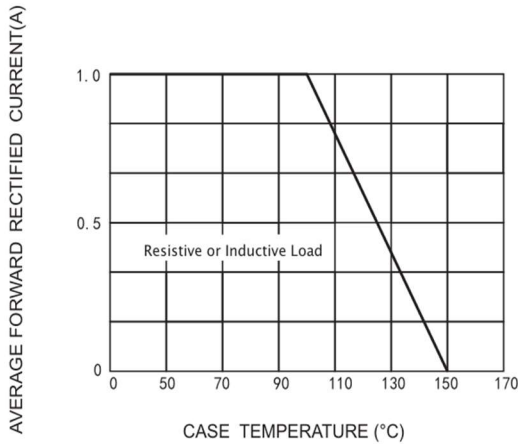


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

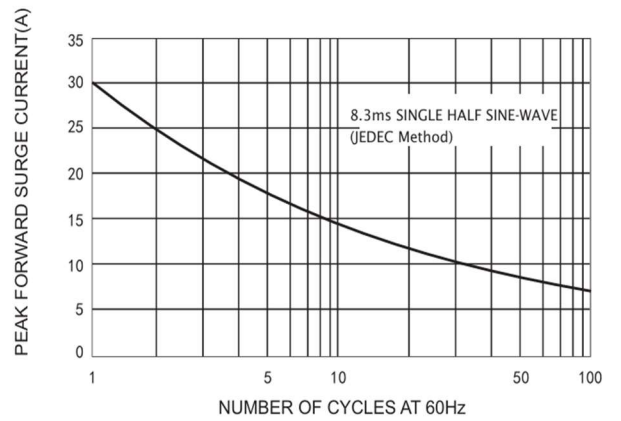


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

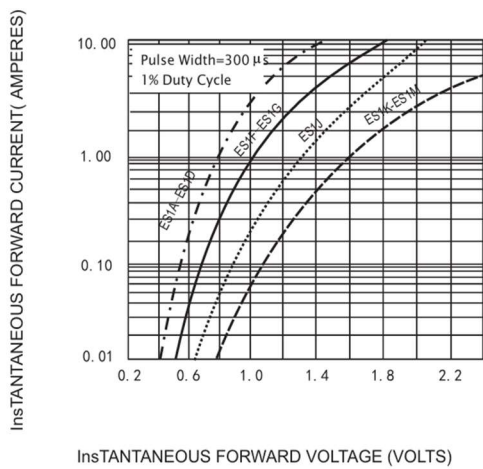


FIG.4-TYPICAL REVERSE CHARACTERISTICS

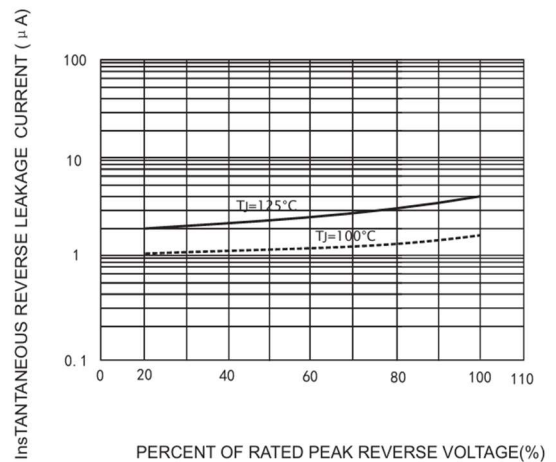


FIG.5-TYPICAL JUNCTION CAPACITANCE

