

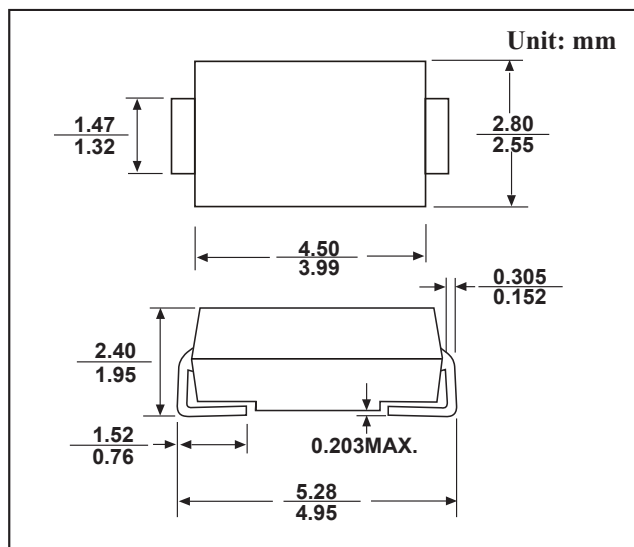
SMA Ultra-Fast Recovery Rectifier Diodes

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SMA molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter		Symbol	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1H	ES1J	UNITS
Maximum recurrent peak reverse voltage		V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage		V_{RMS}	35	70	105	140	210	280	420	560	V
Maximum DC blocking voltage		V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current.375"(9.5mm) Lead Length at T _A =75℃		$I_{\text{F(AV)}}$	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	30.0								A
Maximum Instantaneous Forward Voltage at 1.0A		V_{F}	1.0				1.3		1.7		V
Maximum reverse current at rated DC blocking voltage	@T _A =25℃	I_{R}	5.0								μA
	@T _A =100℃		50.0								
Maximum reverse recovery time (Note1)		t_{rr}	35								ns
Typical junction capacitance (Note2)		C_{J}	15								pF
Typical thermal resistance(Note3)		$R_{\text{θJA}}$	60								℃/W
Operating junction temperature range		T_{j}	- 55 ---- + 125								℃
Storage temperature range		T_{STG}	- 55 ---- + 150								℃

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

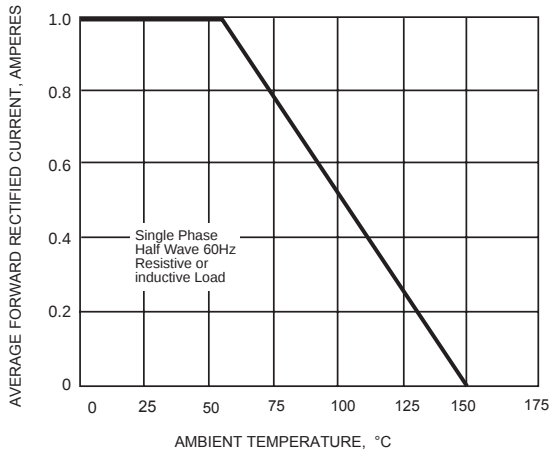


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

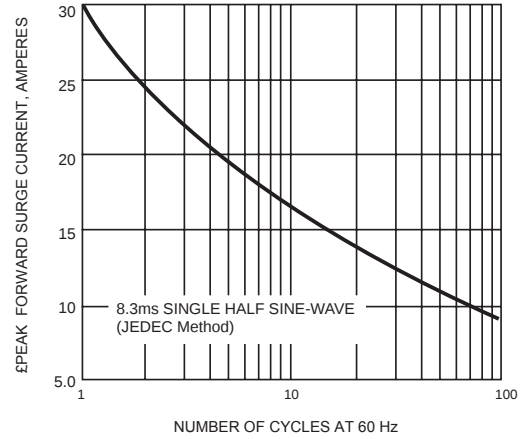


FIG. 3-TYPICAL INSTANTANEOUS FORWARD

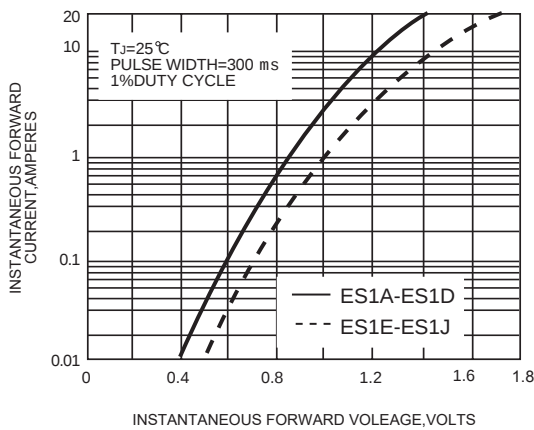


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

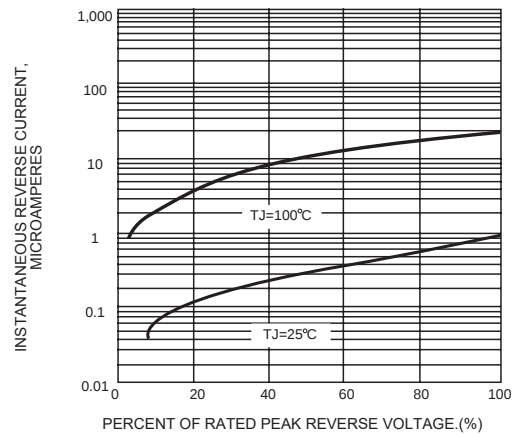


FIG. 5-TYPICAL JUNCTION CAPACITANCE

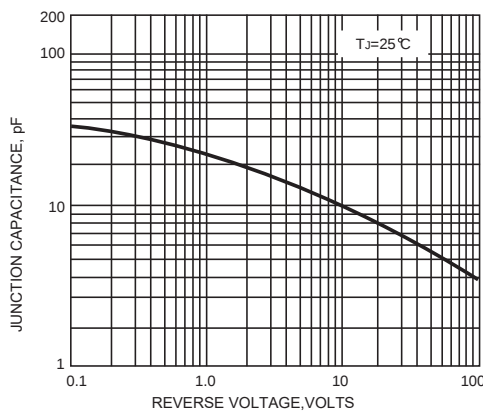


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

