

FEATURES

- Glass Passivated Die Construction
- Super-Fast Recovery Time For High Efficiency
- Low Forward Voltage Drop and High Current Capability
- Ideally Suited for Automated Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0



DO-214AC (SMA)

MECHANICAL DATA

- Case: DO-214AC Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- Weight: 70mg (approx.)



Cathode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

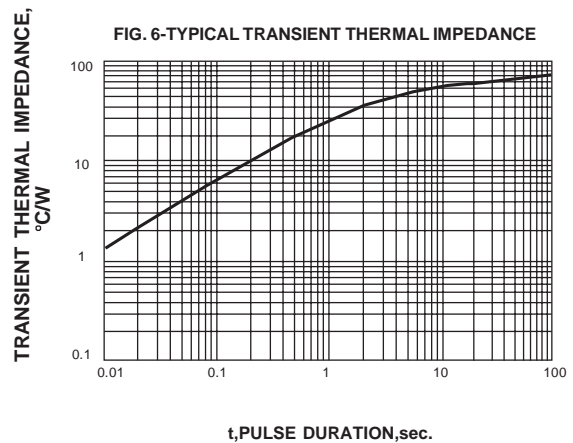
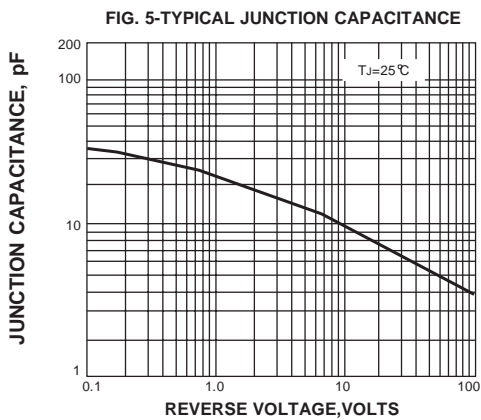
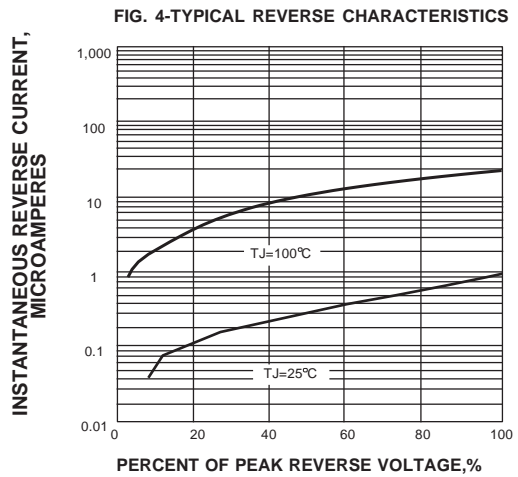
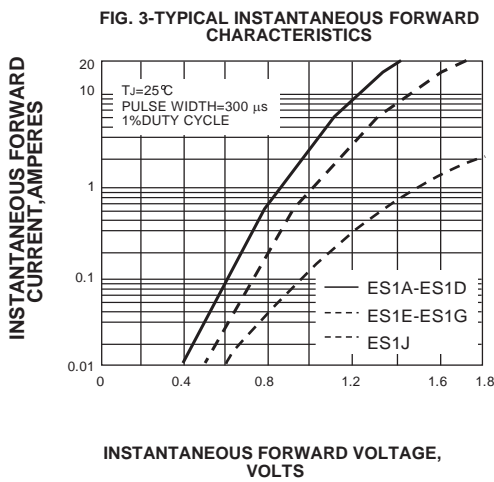
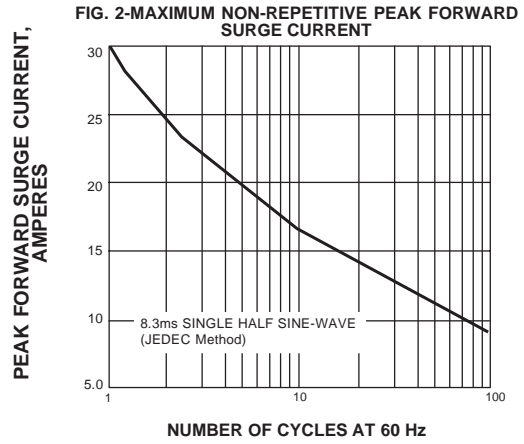
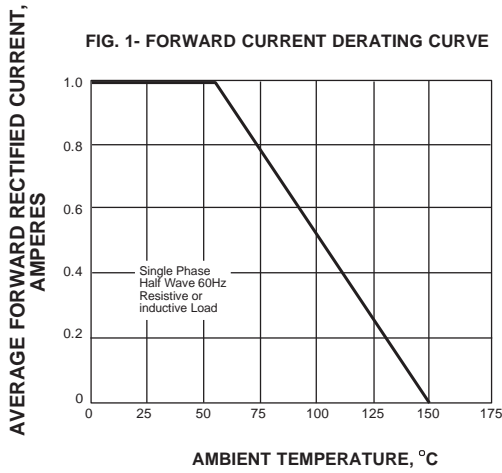
Parameter	Symbol	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	ES1K	ES1M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	800	1000	v
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	560	700	v
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	800	1000	v
Maximum Average Forward Rectified Current at $T_A = 75\text{ }^\circ\text{C}$	$I_{F(AV)}$	1.0									A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC)	I_{FSM}	50.0									A
Maximum Instantaneous Forward Voltage at 1 A	V_F	0.975			1.25		1.7				v
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25\text{ }^\circ\text{C}$		5.0							μA
		$T_A = 100\text{ }^\circ\text{C}$		150.0							
Maximum reverse recovery time (NOTE1)	t_{rr}	50			60			100			nS
Typical Junction Capacitance (NOTE2)	C_j	25.0									pF
Maximum Thermal Resistance (NOTE3)	$R_{\theta JL}$	20.0									$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_{J, TS}$	-50 to +150									$^\circ\text{C}$

Note: 1.Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

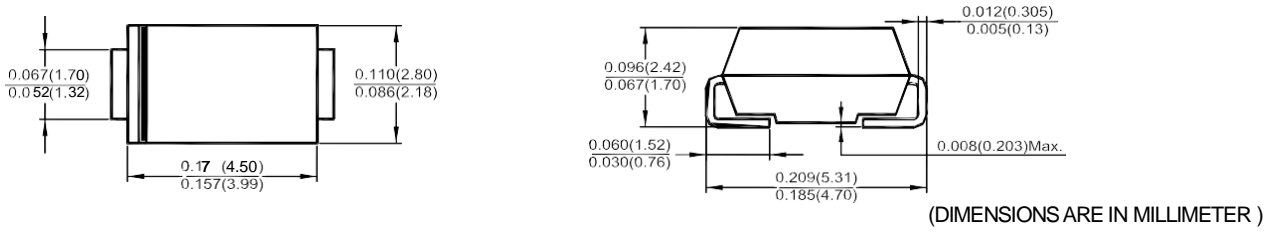
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

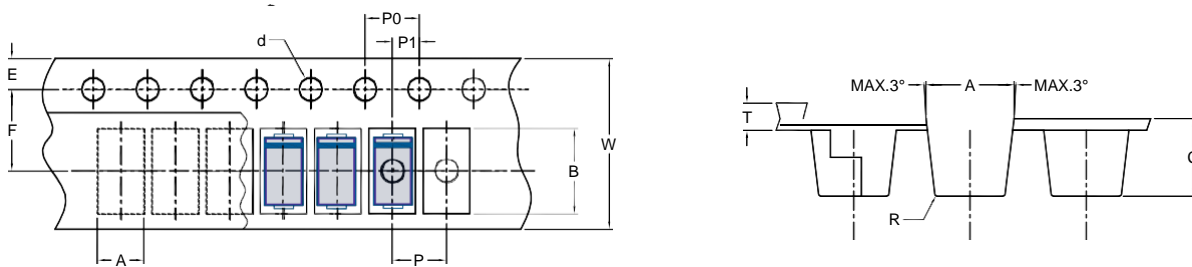
Typical Characteristics



SMA Package Outline Dimensions

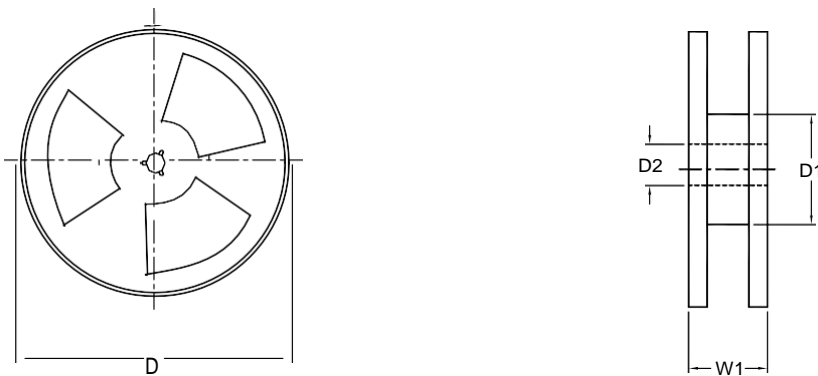


SMA Embossed Carrier Tape



DIMENSIONS ARE IN MILLIMETER											
TYPE	A	B	C	d	E	F	P	P0	P1	T	W
SMA	3.0	5.4	2.4	1.5	1.5	5.65	4	4	2	0.3	12
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.05	±0.2

SMA Reel



DIMENSIONS ARE IN MILLIMETER				
REEL OPTION	D	D1	D2	W1
7" DIA	178	50 min.	13	16.8
TOLERANCE	±2	±0.1	±0.5	±2