

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%.

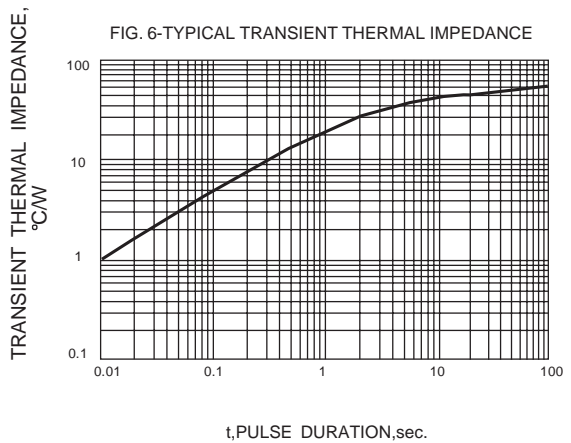
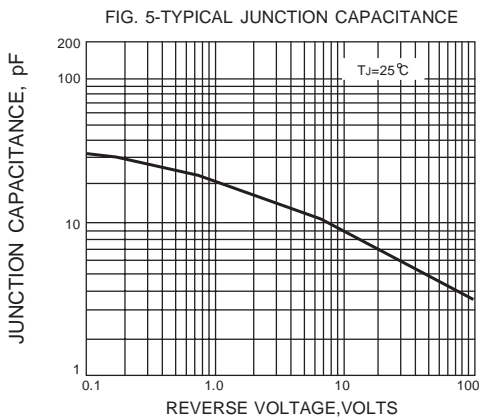
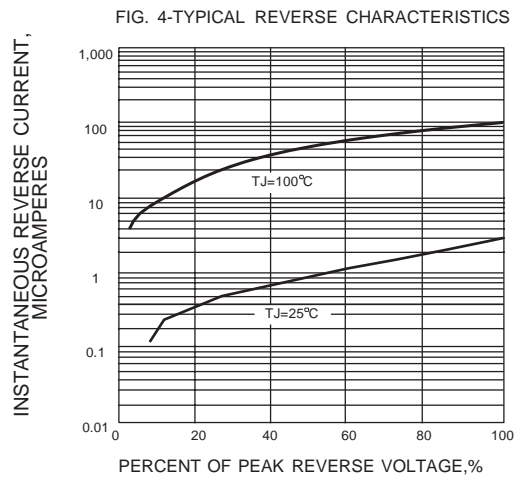
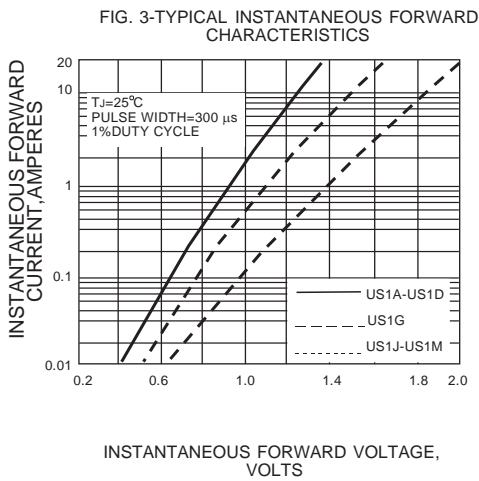
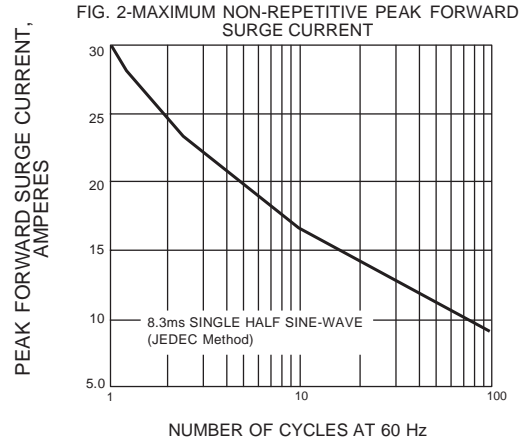
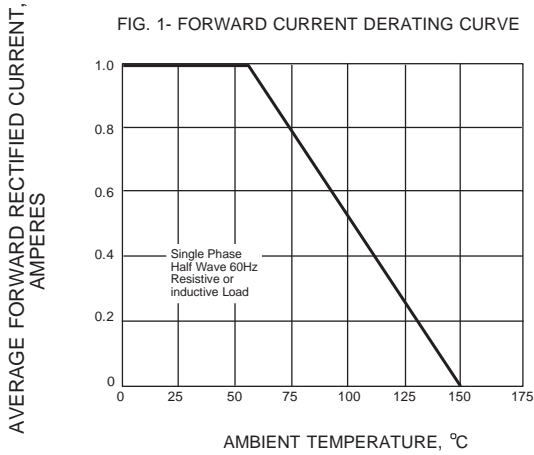
Parameter	Symbol	US1A	US1B	US1D	US1G	US1J	US1K	US1M	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current at $T_A = 75\text{ °C}$	$I_{F(AV)}$	1.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC)	I_{FSM}	30.0							A	
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25\text{ °C}$		5.0					μA	
		$T_A = 100\text{ °C}$		50.0						
Maximum reverse recovery time (NOTE1)	t_{rr}	50				75				nS
Typical Junction Capacitance (NOTE2)	C_J	15.0							pF	
Maximum Thermal Resistance (NOTE3)	$R_{\theta JL}$	50.0							°C/W	
Operating and Storage Temperature Range	$T_{J, TS}$	-65 to + 150							°C	

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

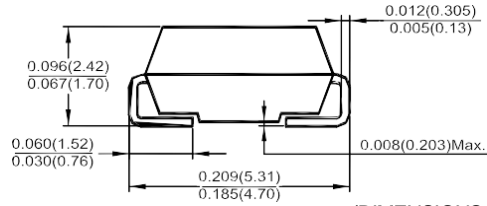
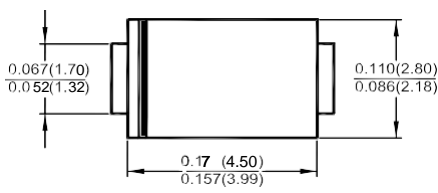
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

Typical Characteristics

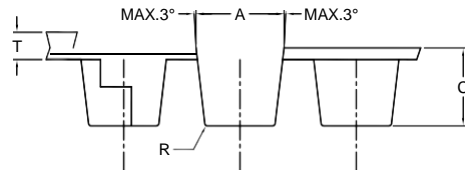
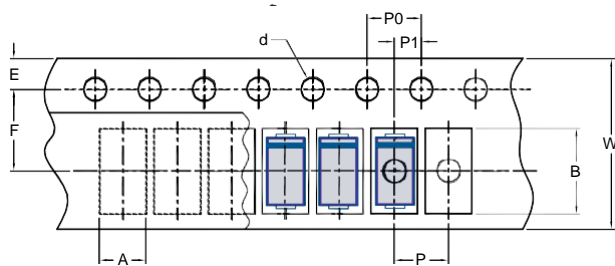


SMA Package Outline Dimensions



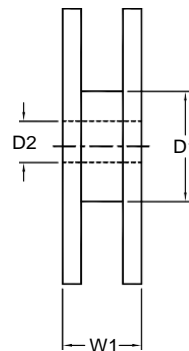
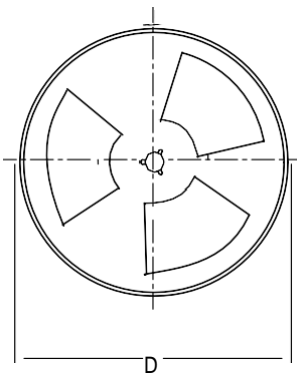
(DIMENSIONS ARE IN MILLIMETER)

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