

Super Fast Recovery Rectifiers

(Pb) Lead(Pb)-Free

Features:

- * High current capability
- * High surge current capability
- * Low reverse current
- * Component in accordance to RoHS 2002/95/EC

Mechanical Data:

- * Case: SMA(DO-214AC)
- * Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- * Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- * Polarity: Cathode Band
- * Weight: 0.062 grams (approximate)

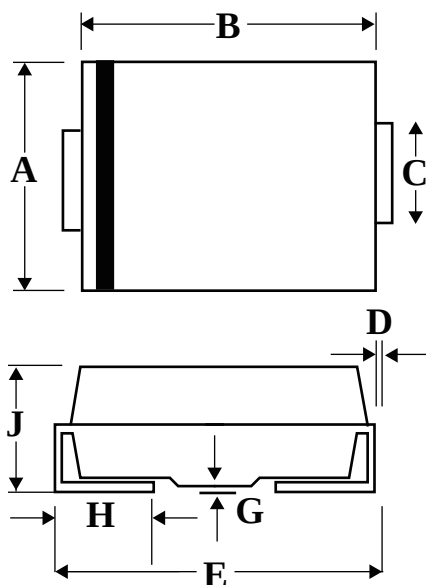
**REVERSE VOLTAGE
50 TO 600 VOLTS
FORWARD CURRENT
2.0 AMPERE**



SMA(DO-214AC)

SMA Outline Dimension

Unit:mm



SMA		
Dim	Min	Max
A	2.20	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.48	5.59
G	0.10	0.20
H	0.76	1.52
J	1.70	2.62

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Characteristics	Symbol	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2JA	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current	I _F	2.0							A
Peak Forward Surge Current,8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	50.0							A
Maximum Instantaneous I _F =2A @ 25°C	V _F	0.98				1.30		1.75	V
Maximum DC Reverse Current @T _a = 25°C At Rated DC BlockingVoltage @T _a = 100°C	I _R	5 100							µA
Maximum Reverse Recovery Time(NOTE2)	T _{rr}	35							nS
Typical Junction Capacitance(NOTE1)	C _J	40				25			pF
Typical thermal resistance	R _{θ JC}	30							°C/W
OperatingTemperature Range	T _J	-55 to +150							°C
StorageTemperature Range	T _{STG}	-55 to +150							°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

2. Measured with $I_F=0.5A$, $I_R=1A$, $IRR=0.25A$

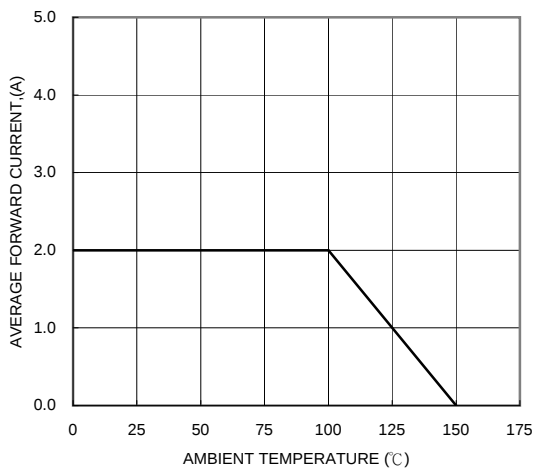


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

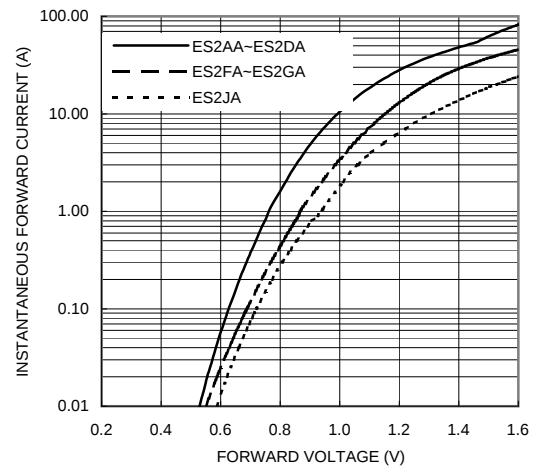


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

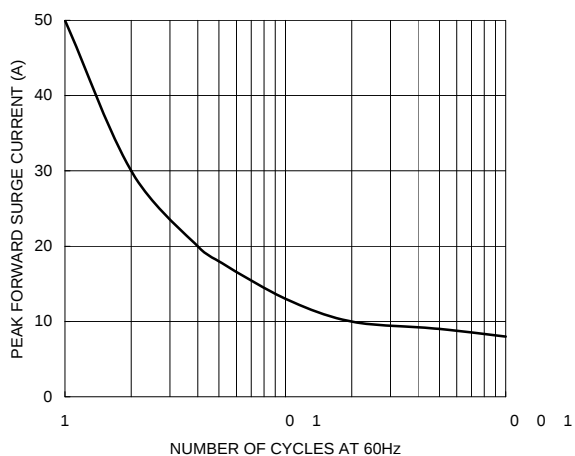


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

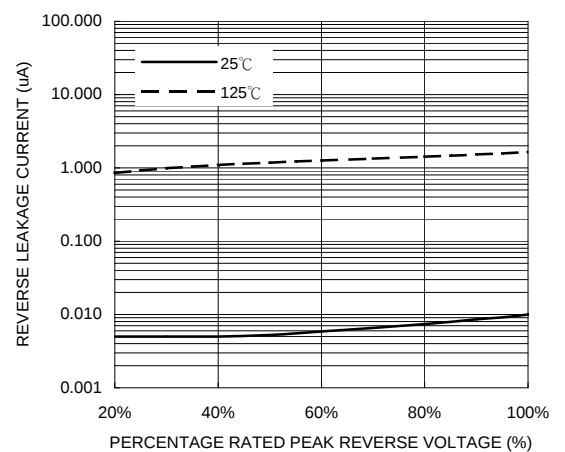


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

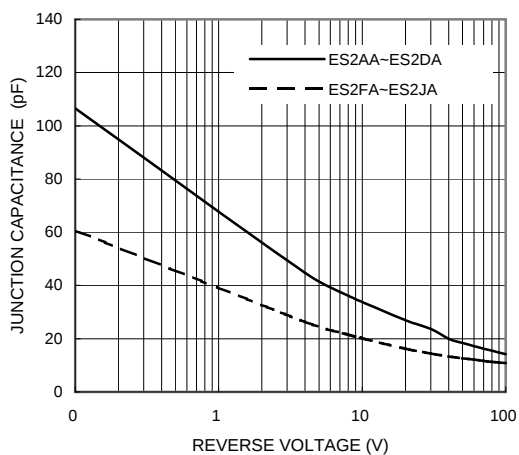


FIG. 5-TYPICAL JUNCTION CAPACITANCE