

Features

- $I_{F(AV)}$ 1A
- V_{RRM} 50V-600V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- ES1X
- X : From A To J

SMA



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	ES1							
				A	B	C	D	E	G	H	J
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	500	600
Maximum RMS Voltage	V_{RMS}	V		35	70	105	140	210	280	350	420
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load	1.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}C$	30							
Operation Junction and Storage Temperature Range	T_J, T_{STG}	$^{\circ}C$		-55 ~ +150							

Electrical Characteristics (T=25 °C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	ES1							
				A	B	C	D	E	G	H	J
Peak Forward Voltage	V _F	V	I _F =1.0A	0.95				1.25		1.70	
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A		35						
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25°C		5					
	T _a =125°C			50							
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	Between junction and ambient		75						
	R _{θJ-L}		Between junction and terminal		27						
Juction Capacitance (Typical)	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		14			12		10	

Typical Characteristics

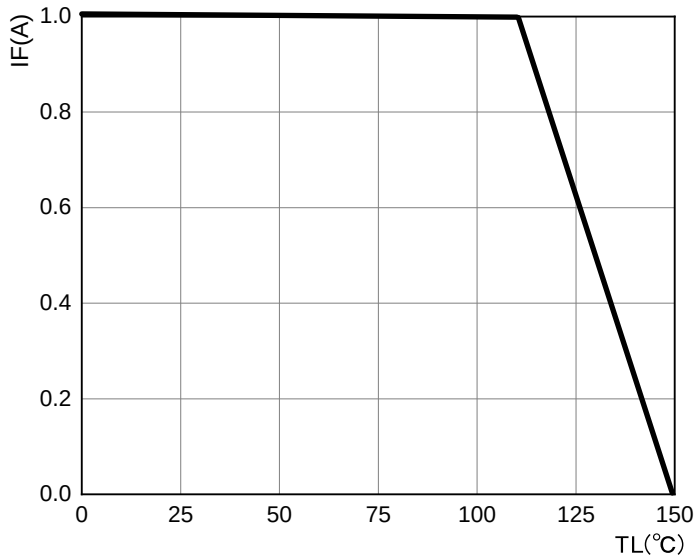


FIG.1: FORWARD CURRENT DERATING CURVE

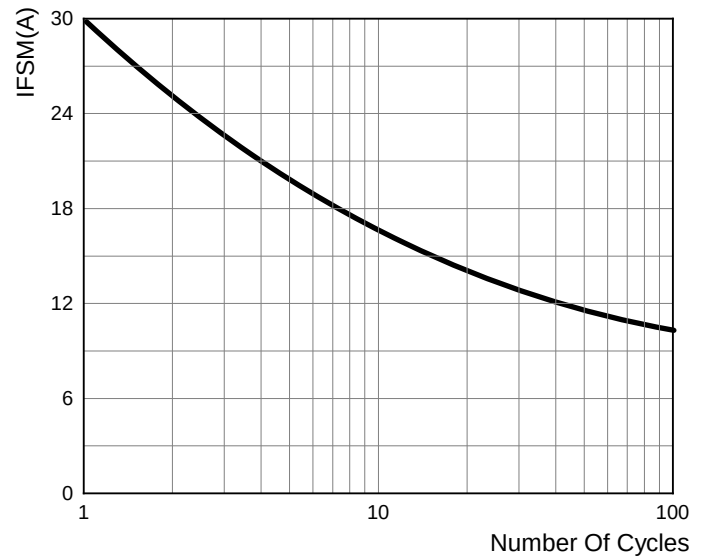


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

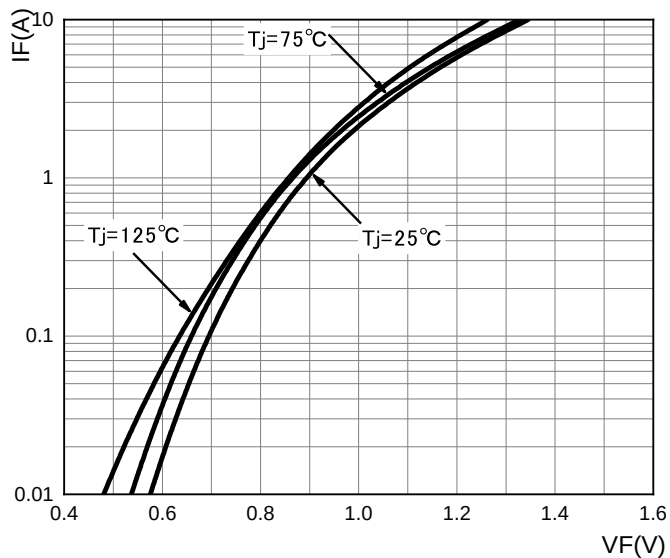


FIG.3 : TYPICAL FORWARD CHARACTERISTICS

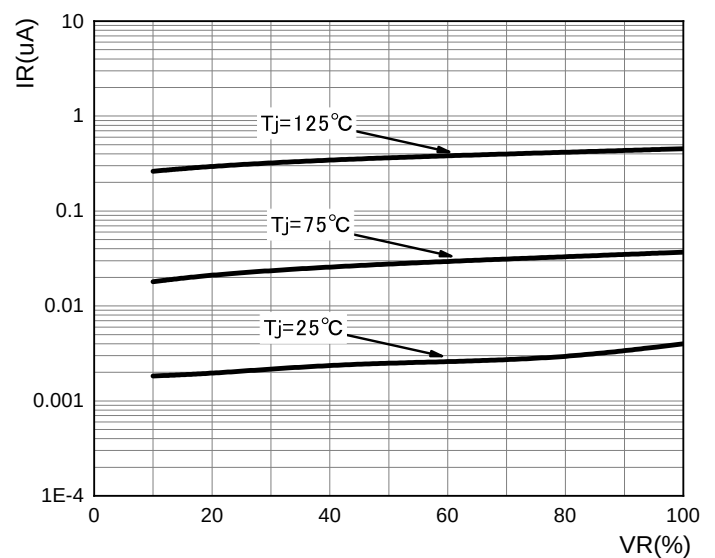


FIG.4 TYPICAL REVERSE CHARACTERISTICS

SMA Package Outline Dimensions

