

Features

- $I_{F(AV)}$ 1A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- RS1X
- X : From A To M

SMA



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	RS1						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	V _{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V		35	70	140	280	420	560	700
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave, Resistance load, Ta=75 ℃	1.0						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25 ℃	30						
Operation Junction and Storage Temperature Range	T _J ,T _{STG}	℃		-55 ~ +150						

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

Item	Symbol	Unit	Test Condition		RS1						
					A	B	D	G	J	K	M
Peak Forward Voltage	V _F	V	I _F =1.0A		1.3						
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A		150				250	500	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃	5						
	T _a =125℃			50							
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		55						
	R _{θJ-L}		Between junction and terminal		25						

Typical Characteristics

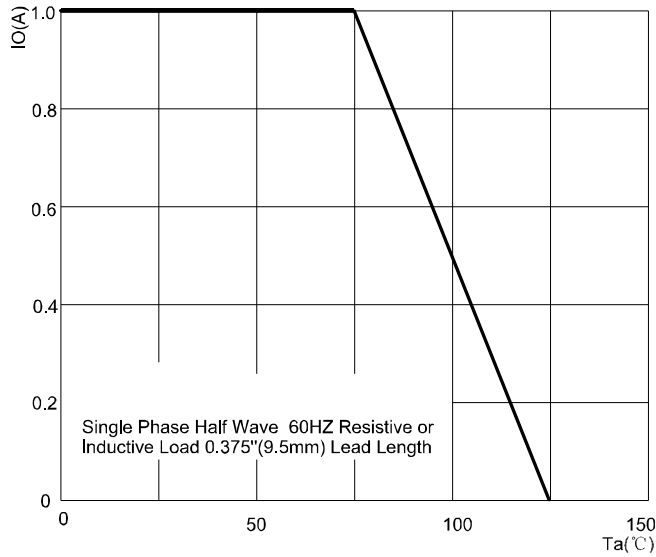


FIG.1: FORWARD CURRENT DERATING CURVE

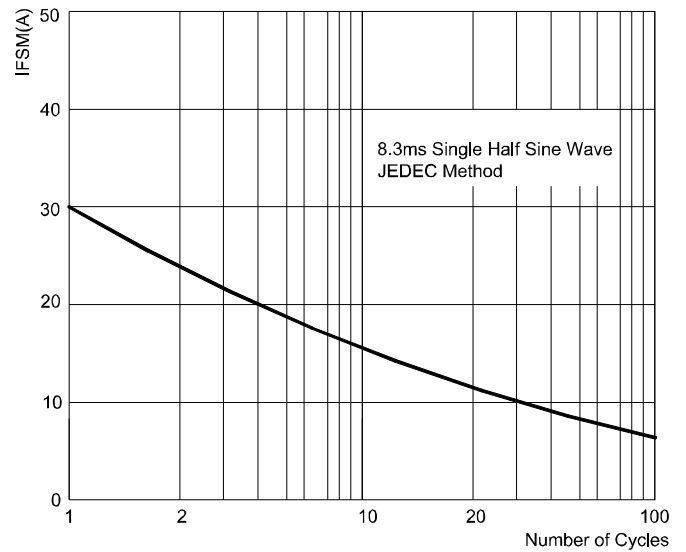


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

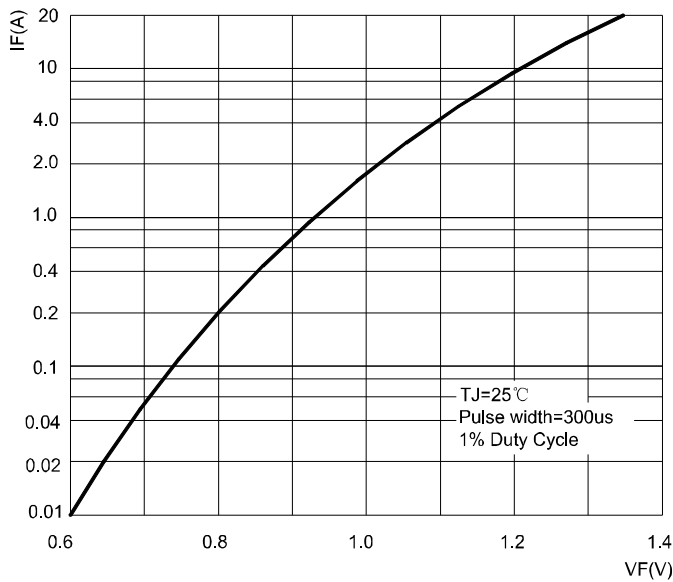


FIG.3: TYPICAL FORWARD CHARACTERISTICS

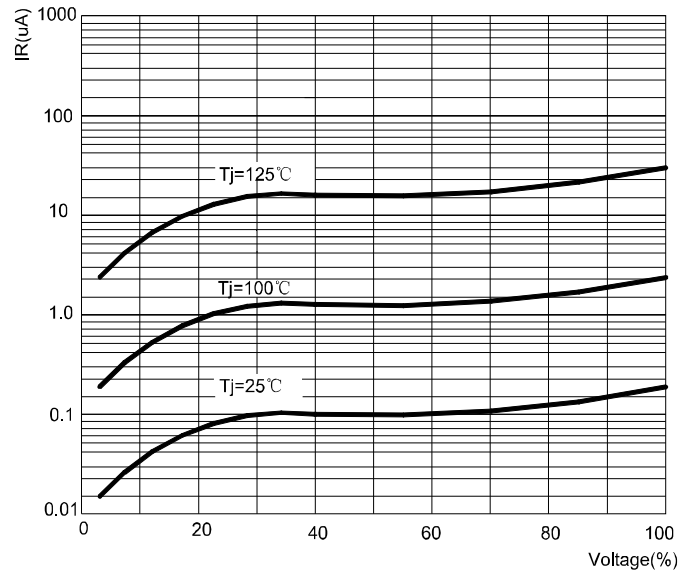


FIG.4: TYPICAL REVERSE CHARACTERISTICS

SMA Package Outline Dimensions

