ES2A THRU ES2J
Super Fast Recovery Rectifier Diodes

Features

- $I_{F(AV)}$ 2A
- V_{RRM} 50V-600V
- High surge current capability
- Polarity: Color band denotes cathode

SMA

Applications

- Rectifier

Marking

- ES2X

  X：From A To J

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	ES2							
				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	2.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	50							
Operation Junction and Storage Temperature Range	T_J, T_{STG}	℃		-55 ~ +150							

Electrical Characteristics (T=25 ℃Unless otherwise specified)

Item	Symbol	Unit	Test Condition		ES2							
					A	B	C	D	E	G	H	J
Peak Forward Voltage	V_F	V	I_F=2.0A		0.95				1.25		1.7	
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℃	5.0							
	I_{RRM2}			T_a=125℃	50							
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		75							
	$R_{\theta J-L}$		Between junction and terminal		27							
Juction Capacitance (Typical)	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		26				20			

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

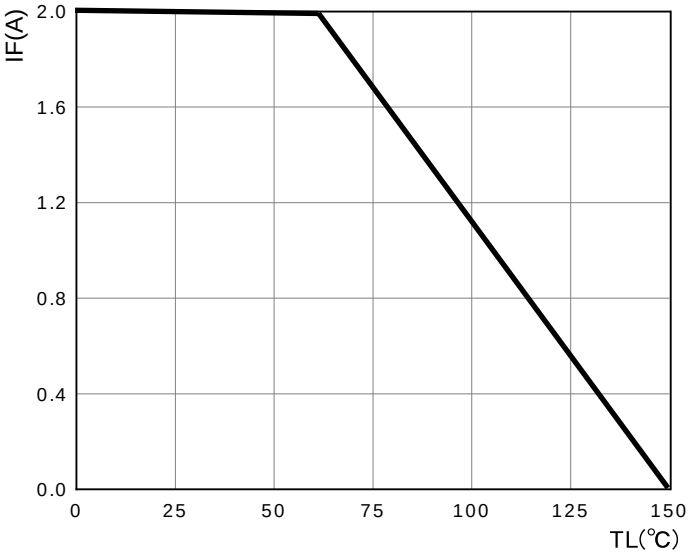


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

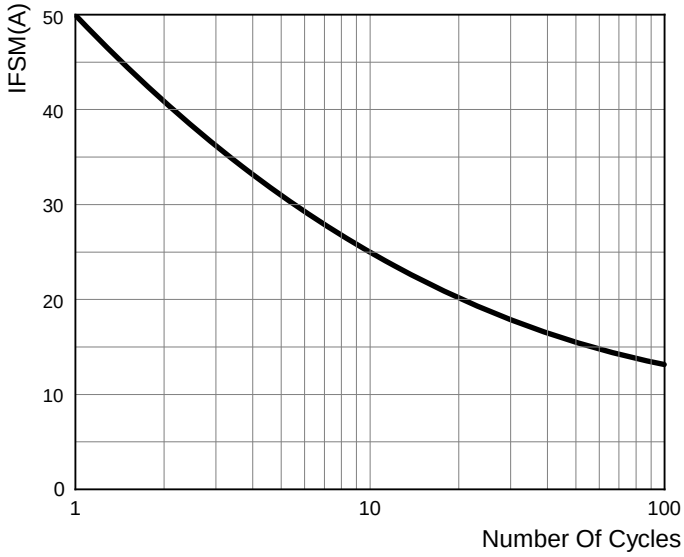


FIG.3 : TYPICAL FORWARD CHARACTERISTICS

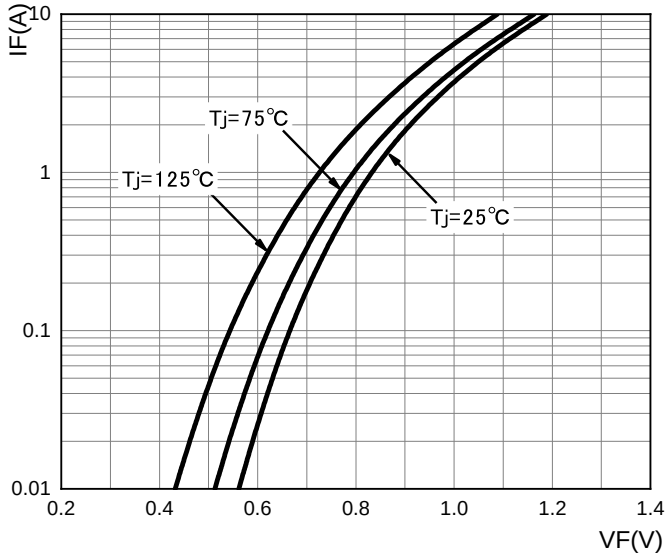
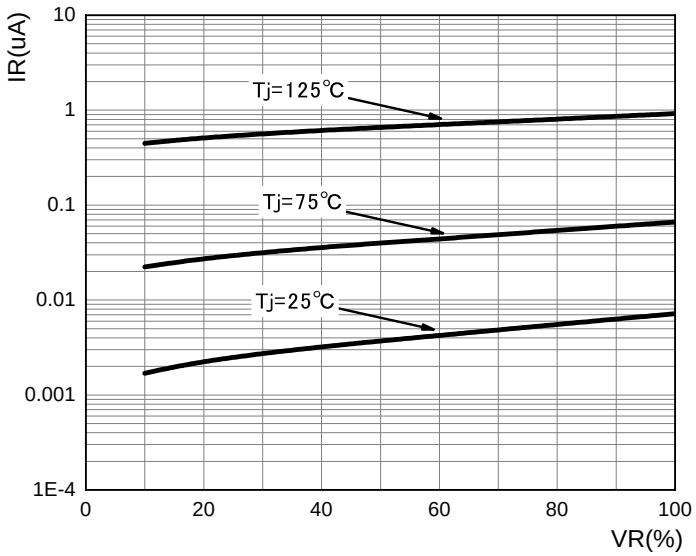


FIG.4 TYPCAL REVERSE CHARACTERISTICS



SMA Package Outline Dimensions