US1A-US1M
High Efficient Rectifier Diodes

FEATURES

- Average Forward Current:$I_{F(AV)}$=1A
- Polarity: Color band denotes cathode



SMA



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
US1A-US1M	SMA	US1*	2000

*:FromA-M

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

Item	Symbol	Unit	Test Conditions	US1						
				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, T_L=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_a=25℃unless otherwise specified)

Item	Symbol	Unit	Test Condition		US1						
					A	B	D	G	J	K	M
Peak Forward Voltage	V_F	V	I_F=1.0A		1.0			1.3	1.7		
Maximum reverse recovery time	t_{rr}	ns	I_F=0.5A,I_R=1.0A,I_{rr}=0.25A		50				75		
Peak Reverse Current	I_{RRM1}	μA	V_{RM}=V_{RRM}	Ta=25℃	5						
	I_{RRM2}			Ta=125℃	50						
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		55						
	$R_{\theta J-L}$		Between junction and terminal		25						

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

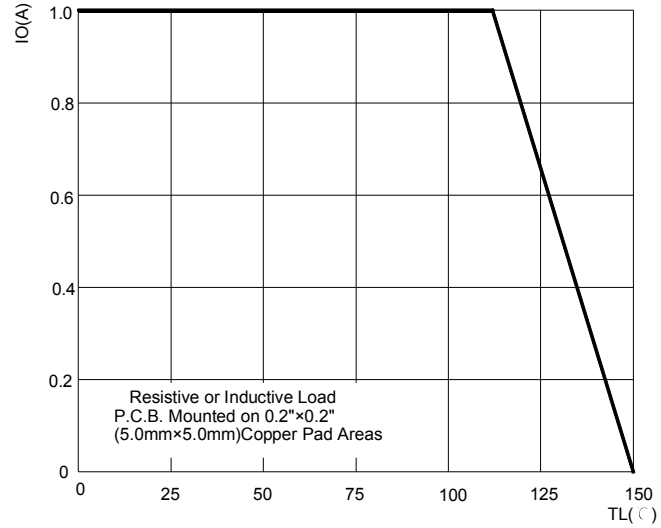


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

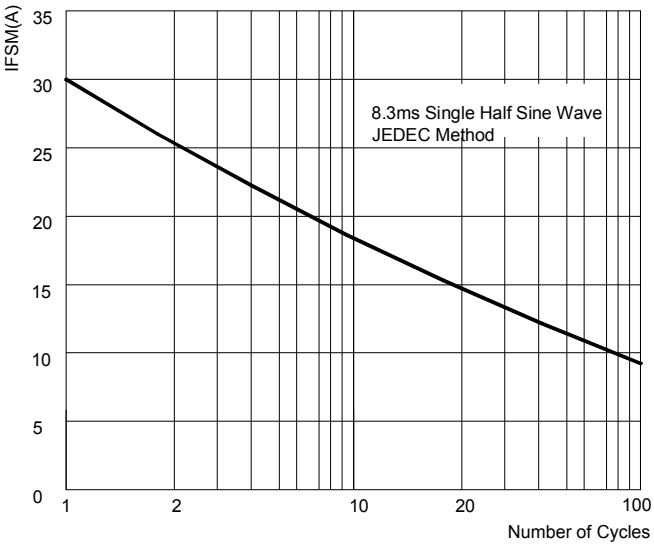


FIG.3: TYPICAL FORWARD CHARACTERISTICS

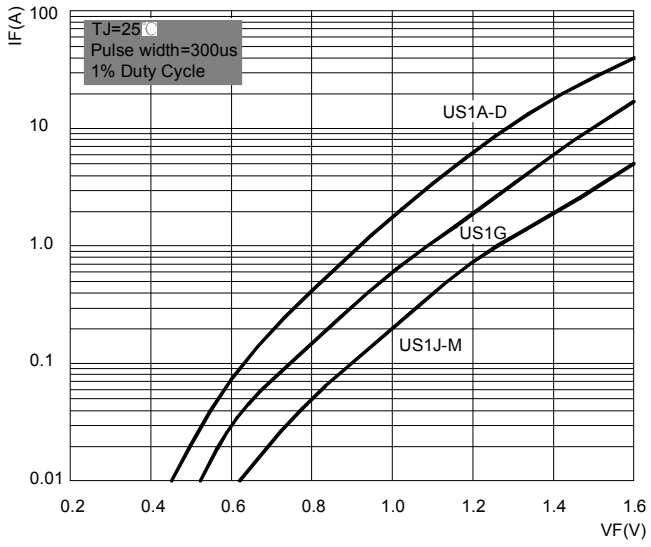


FIG.4：TYPICAL REVERSE CHARACTERISTICS

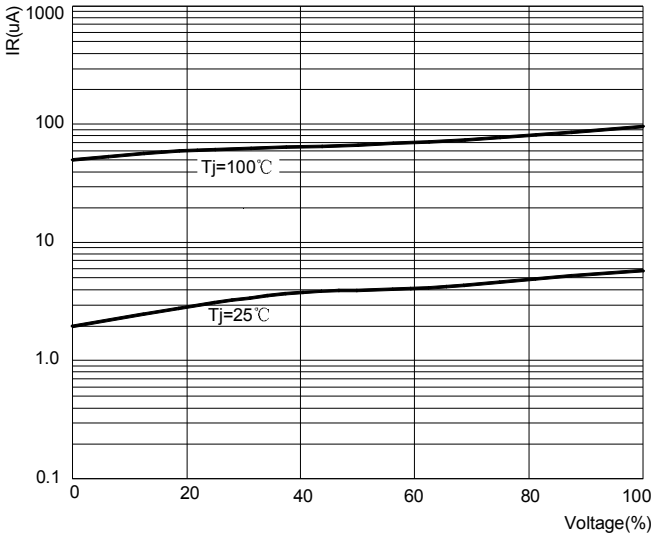
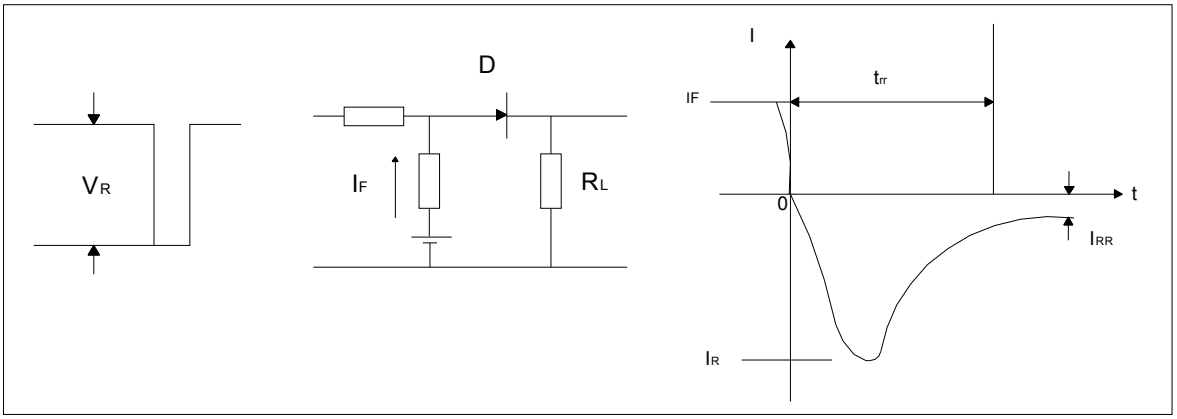
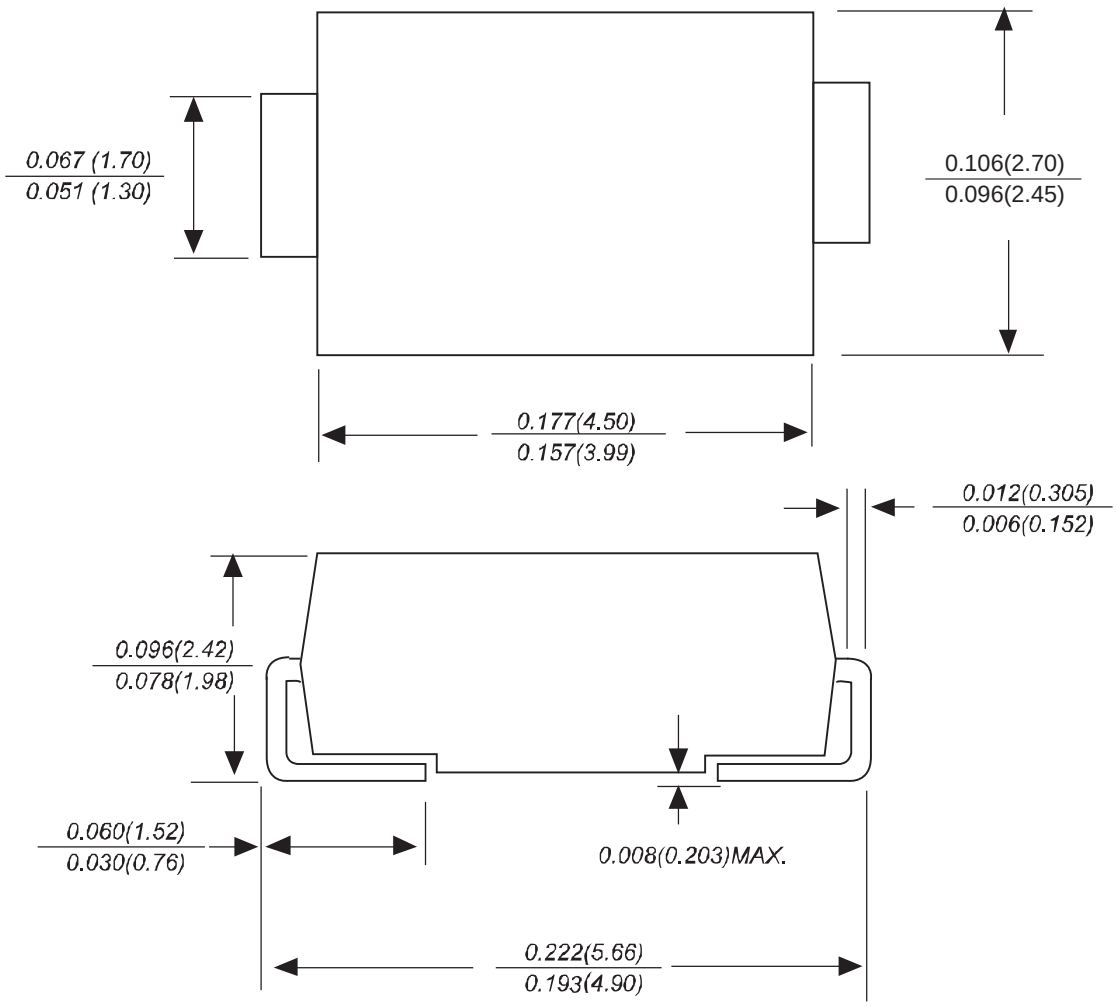


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



SMA Package Outline Dimensions



Dimensions in inches and (millimeters)

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