



Features

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



SMAF



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
US1AF-US1MF	SMAF	US1xF	10000

x: From A-M

Maxmim Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Test Conditions	US1						
				AF	BF	DF	GF	JF	KF	MF
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 =115° C	1.0						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave , 1 cycle, T _a =25° C	30						
Operation Junction and Storage Temperature Range	T _J ,T _{STG}	° C		-55 ~ +150						

Electrcal Charcteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Unit	Test Condition		US1					
					AF	BF	DF	GF	JF	KF
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}	T _a =25° C	5					
	T _a =125° C			100						
Thermal Resistance(Typical)	R _{θJ-A}	° C / W	Between junction and ambient		75					
	R _{θJ-L}		Between junction and terminal		27					

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

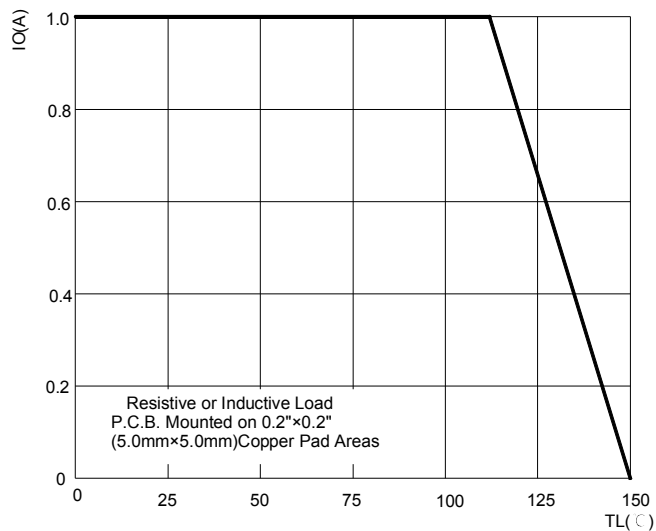


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

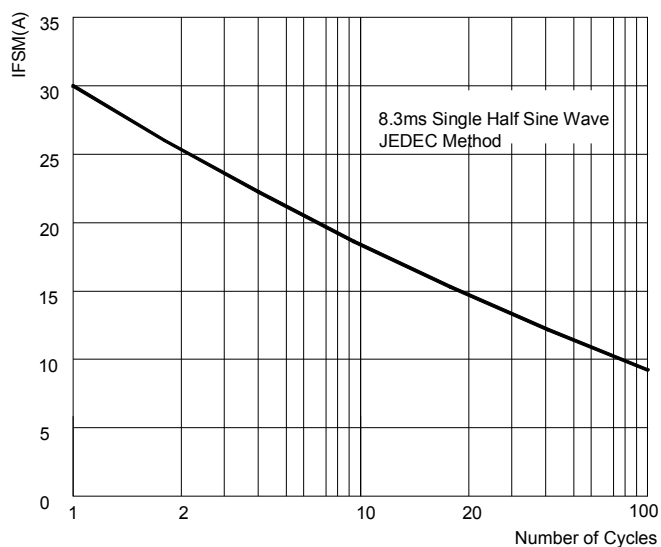


FIG.3: TYPICAL FORWARD CHARACTERISTICS

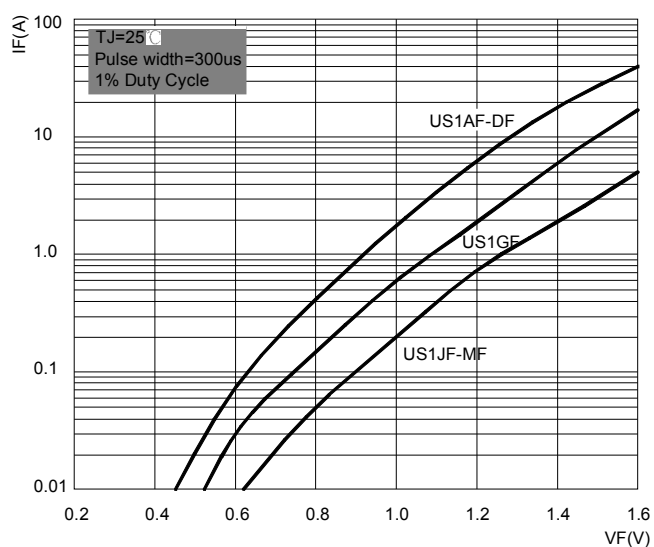


FIG.4: TYPICAL REVERSE CHARACTERISTICS

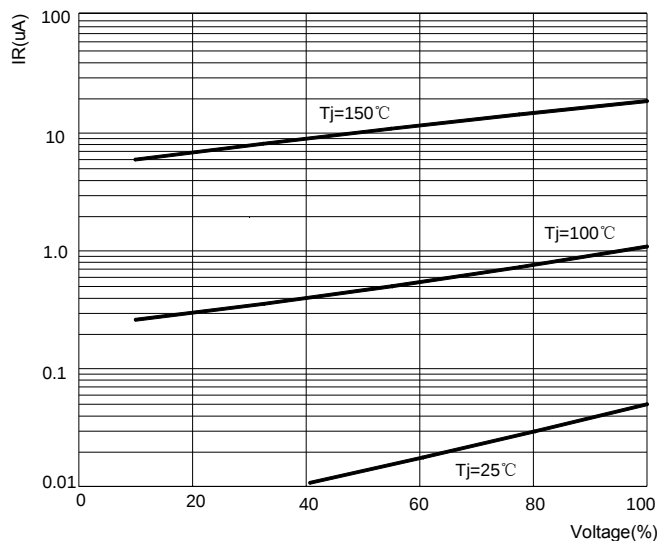
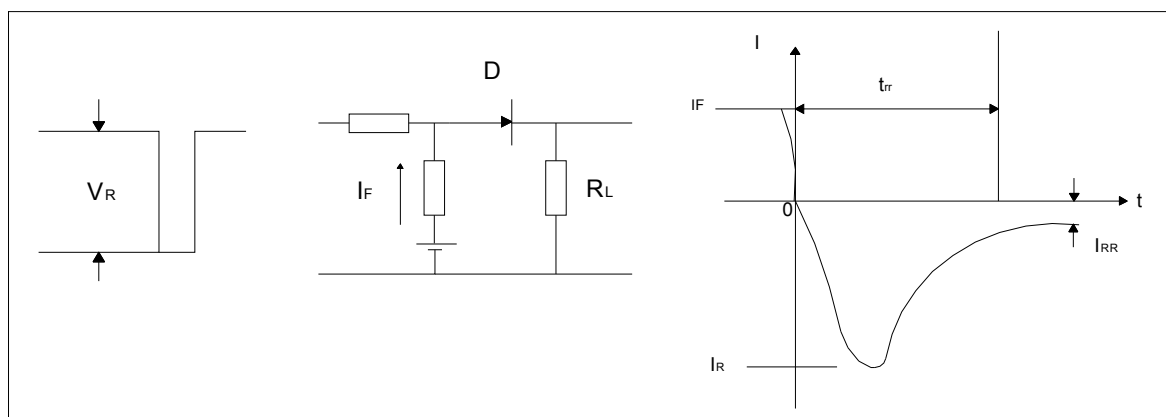
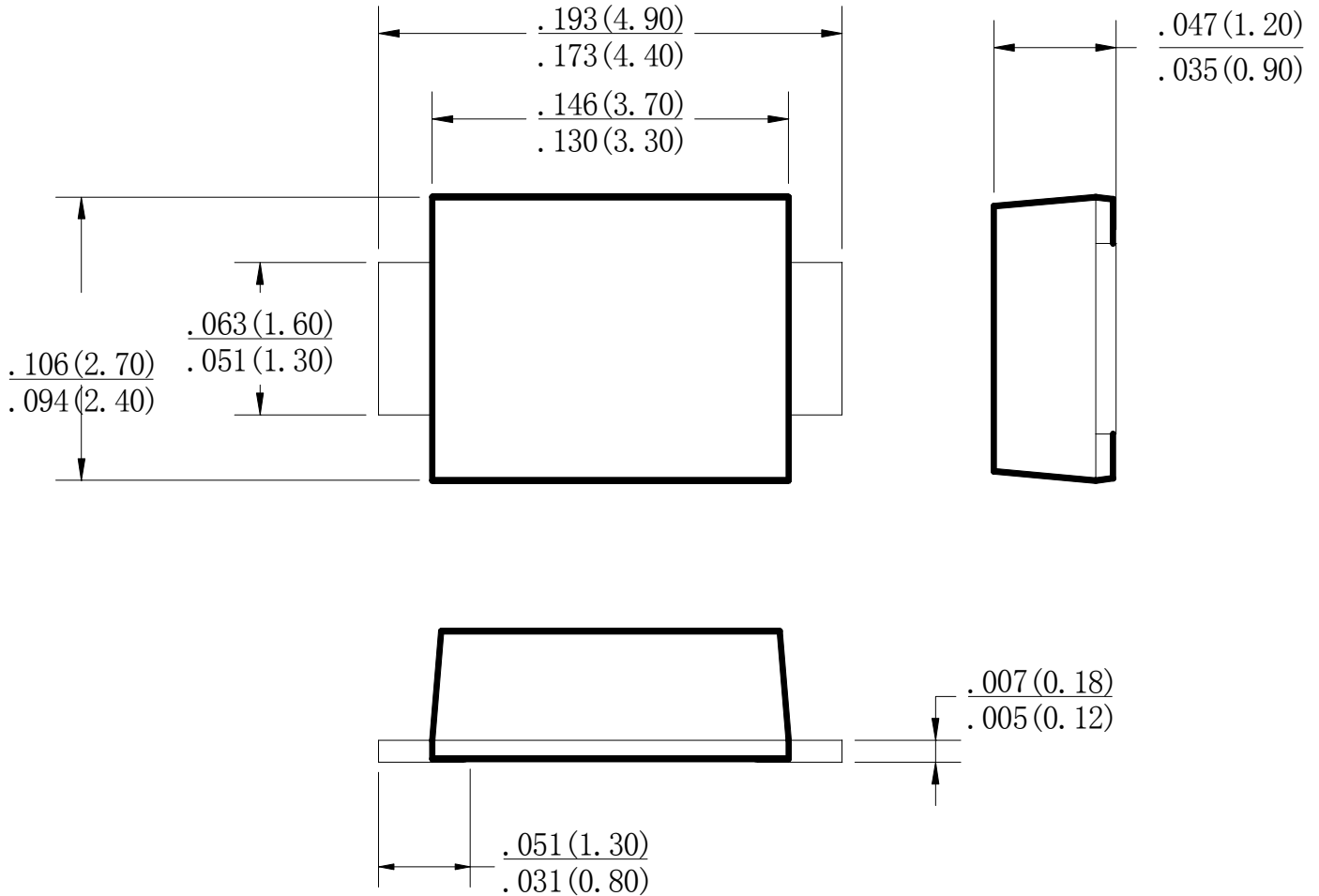


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)



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