

SS52A-SS520A Schottky Rectifier
Feature

- High current capability
- Low VF
- High surge current capability

Application

- Rectifier

Marking

- SS5X
X: From 2 To 20

SMAG

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symb ol	SS5									Unit
		2	3	4	5	6	8	10	15	20	
Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Average Forward Current (60HZ Half-sine wave, Resistance load, TL(Fig.1))	I _{F(AV)}	5.0									A
Non-repetitive Peak Forward Surge Current (60Hz Half-sine wave ,1 cycle ,Ta =25℃)	I _{FSM}	150									A
Junction Temperature	T _J	-65 ~ +125			-65 ~ +150						℃
Storage Temperature	T _{STG}	-65 ~ +150									℃

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition		SS5								Unit
				2	3	4	5	6	8	10	15	
Peak Forward Voltage	V _F	I _F =1A		0.55		0.70		0.85		0.95		V
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM}	T _a =25℃	0.5				0.1				mA
	T _a =100℃		10				5.0				mA	
Thermal Resistance(Typical)	R _{θJ-A}	Between junction and ambient		55								℃/W
	R _{θJ-L}	Between junction and terminal		17								℃/W

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.20" x 0.20" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

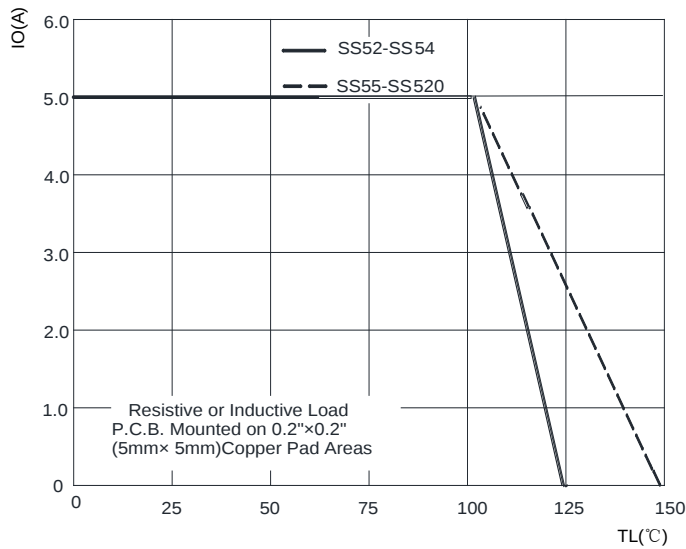


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

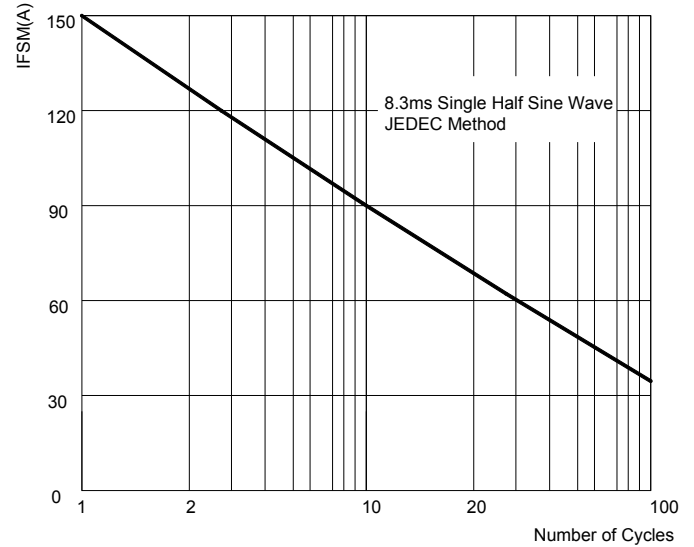


FIG.3: TYPICAL FORWARD CHARACTERISTICS

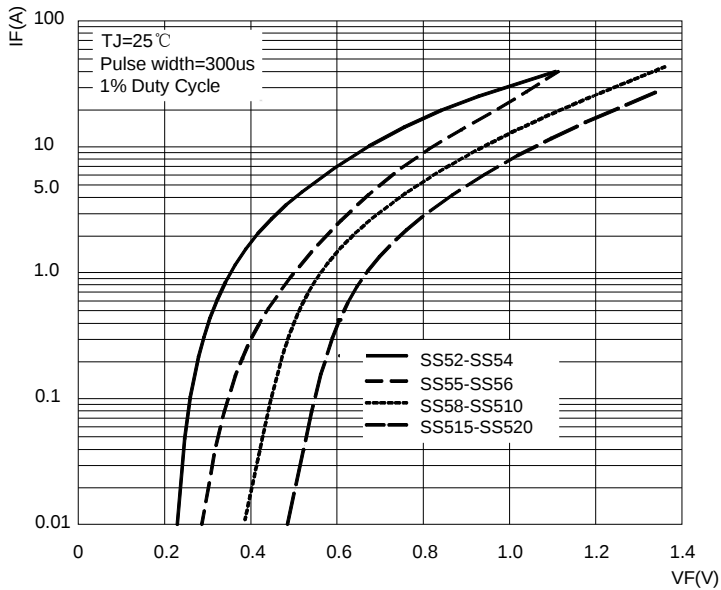
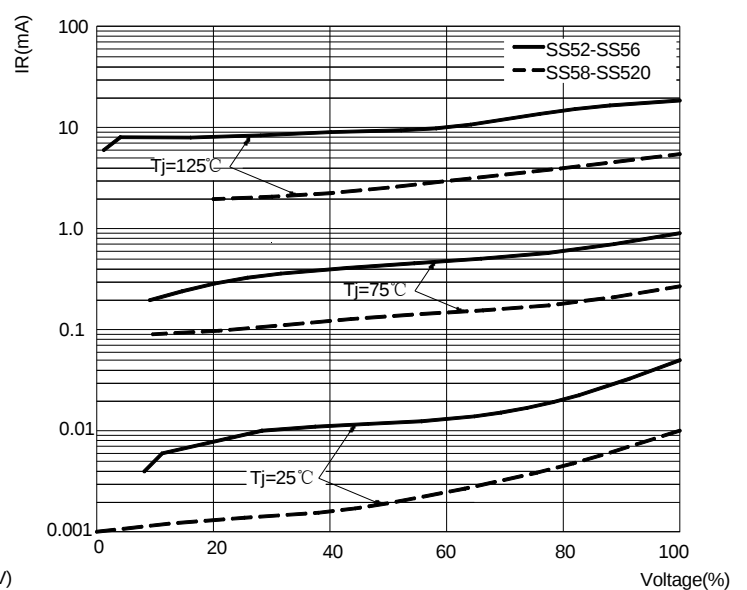
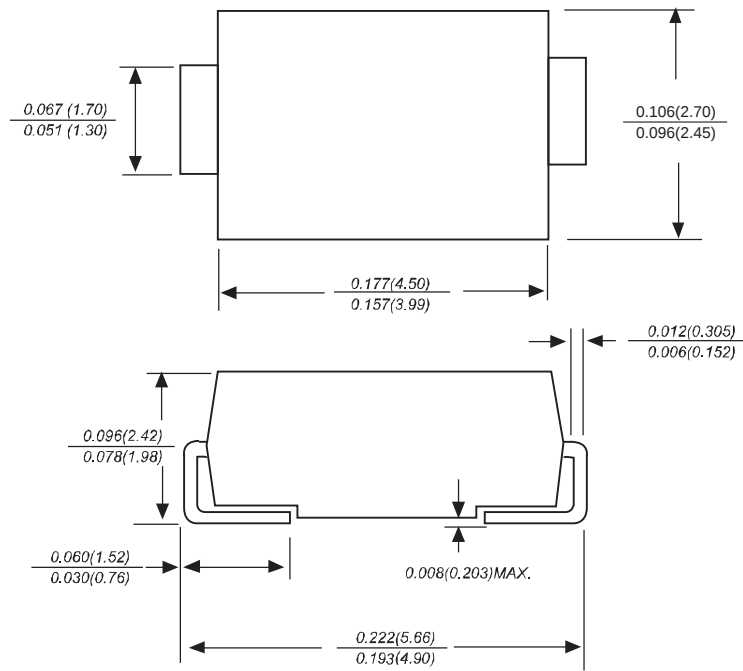
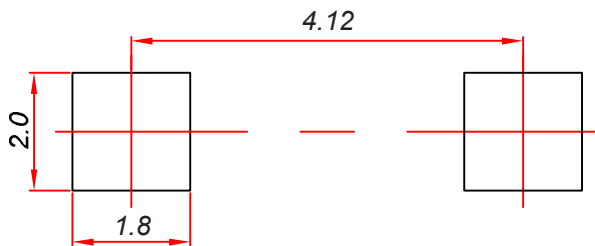


FIG.4: TYPICAL REVERSE CHARACTERISTICS



SMAG Package Outline Dimensions


Dimensions in inches and (millimeters)

SMAG Suggested Pad Layout

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.