



SS52A-SS520A Schottky Rectifier

Feature

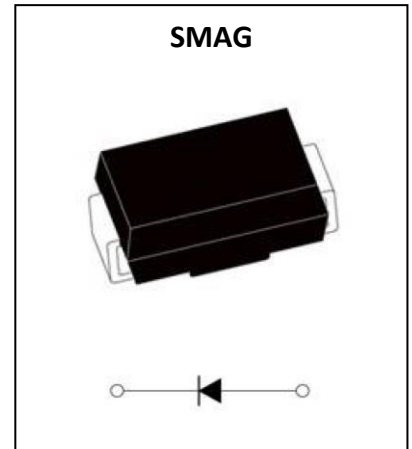
- High current capability
- Low VF
- High surge current capability

Application

- Rectifier

Marking

- SS5X
X: From 2 To 20



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

Parameter	Symbol	SS5XA									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 , $T_a =25^\circ\text{C}$)	I_{FSM}	150									A
Junction Temperature	T_J	-65 ~ +125			-65 ~ +150						$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150									$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	SS5XA							Unit	
			2	3	4	5	6	8	10		15
Peak Forward Voltage	V_F	$I_F = 1\text{A}$	0.55		0.70		0.85		0.95		V
Peak Reverse Current	I_{RRM1}	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$			0.5		0.1			mA
	I_{RRM2}		$T_a=100^\circ\text{C}$			10		5.0			mA
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient	55							$^\circ\text{C/W}$	
	$R_{\theta J-L}$	Between junction and terminal	17							$^\circ\text{C/W}$	

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

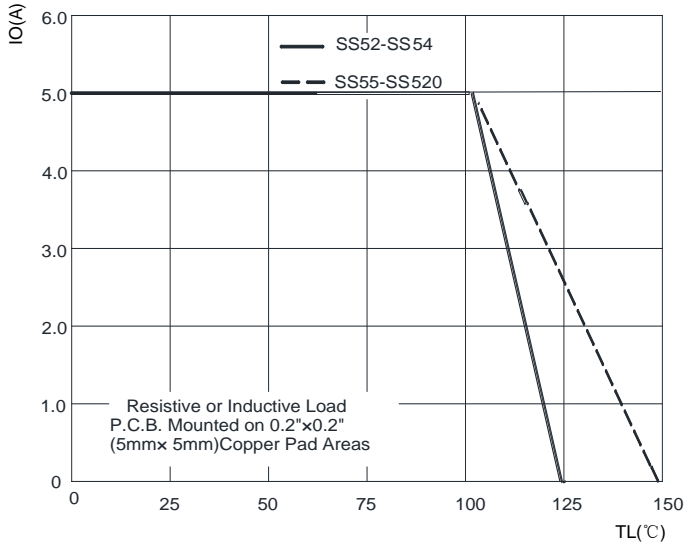


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

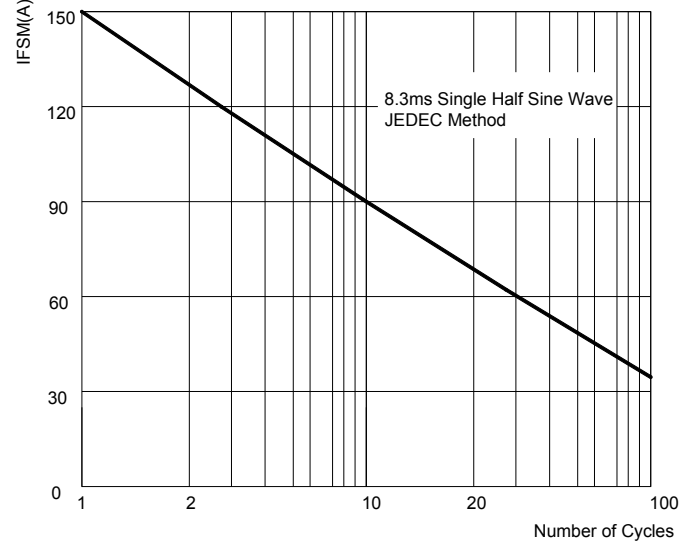


FIG.3: TYPICAL FORWARD CHARACTERISTICS

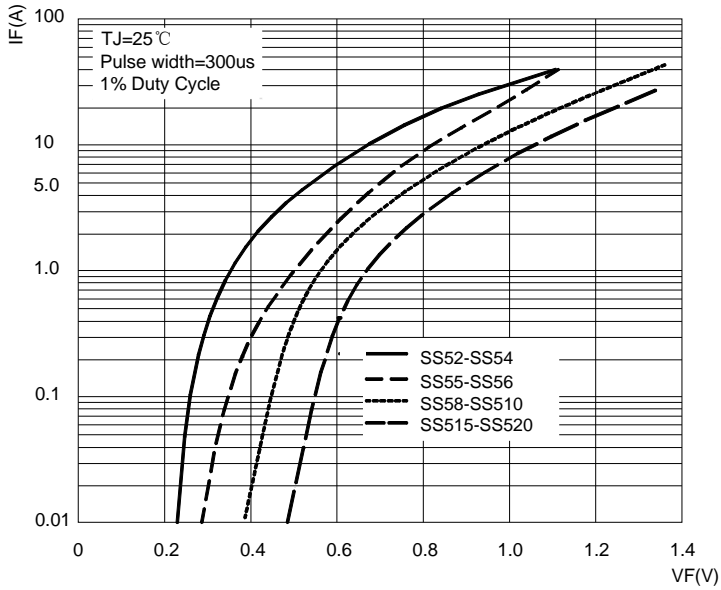
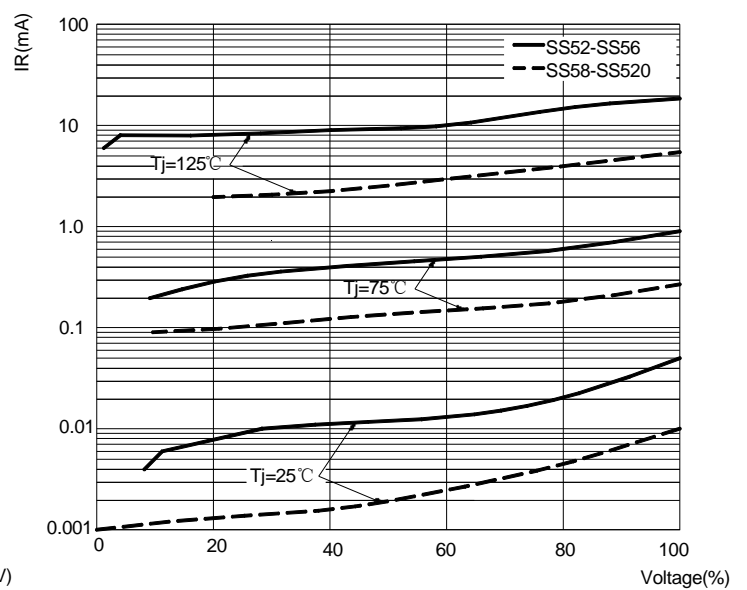
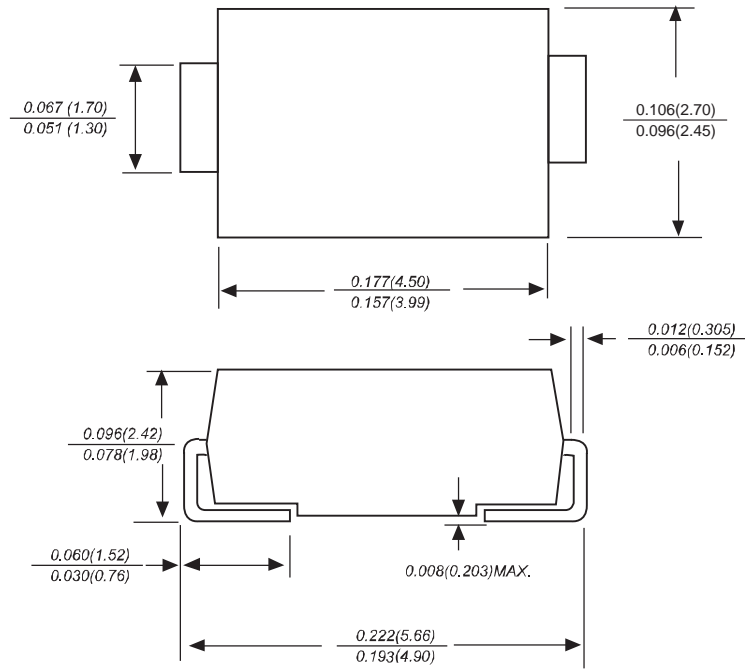


FIG.4: TYPICAL REVERSE CHARACTERISTICS

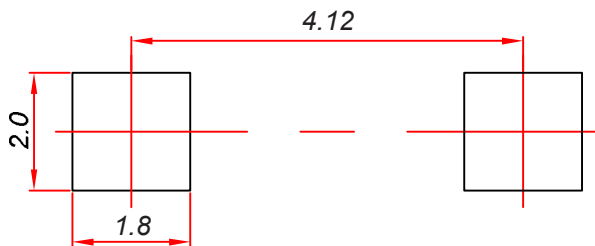


SMAG Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAG Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.