

SS52B THRU SS520B

Schottky Rectifier

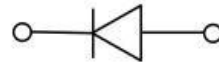
Features

- High efficiency operation
- Guard ring for enhanced ruggedness and long term reliability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C



Typical Application

For use in switching power supplies, converters, freewheeling diodes and reverse battery protection.



Mechanical Data

- Package: DO-214AA(SMB)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	SS	SS	SS	SS	SS	SS	SS	SS	SS
				52B	53B	54B	55B	56B	58B	510B	515B	520B
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100	150	200
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, TL(Fig.1)	5.0								
Surge(Nonrepetitive)Forward Current	I_{FSM}	A	60HZ Half-sine wave, 1 cycle, Ta=25°C	100								
Junction Temperature	T_{stg}	°C		-55 ~ +125				55 ~ +150				
Storage Temperature	T_j	°C		-55 ~ +150								

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	SS	SS	SS	SS	SS	SS	SS	SS	SS
				52B	53B	54B	55B	56B	58B	510B	515B	520B
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 5.0A$	0.55		0.6	0.7		0.85		0.9	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM} = V_{RRM}$	Ta=25°C			1.0					
	I_{RRM2}			Ta=100°C			50					
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	Between junction and ambient	60 ¹⁾								
	$R_{\theta J-L}$		Between junction and terminal	20 ¹⁾								

Notes:

¹⁾Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm)copper pad areas



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■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

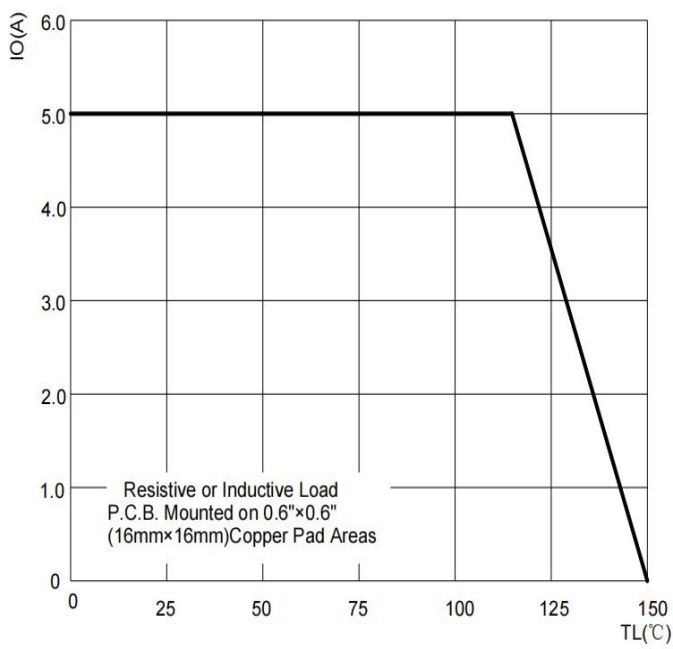


FIG2:Maximum Non-Repetitive Forward Surge Current

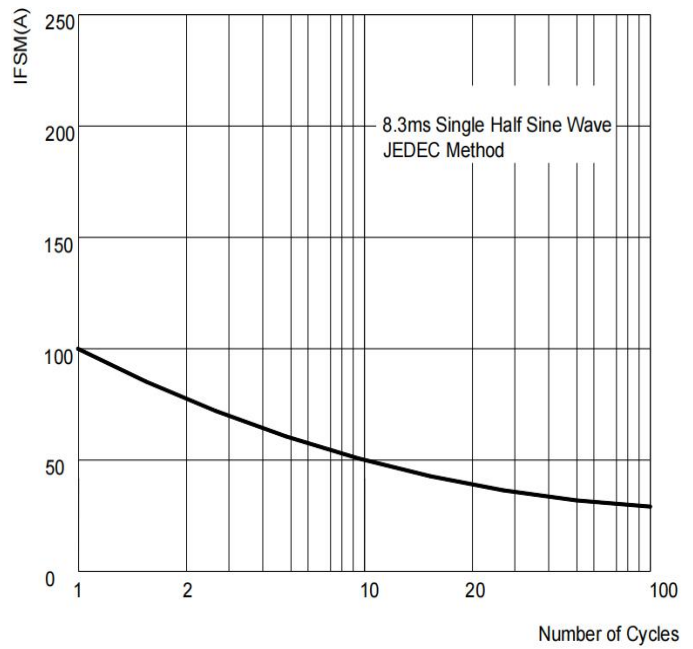


FIG3:Typical Forward Characteristics

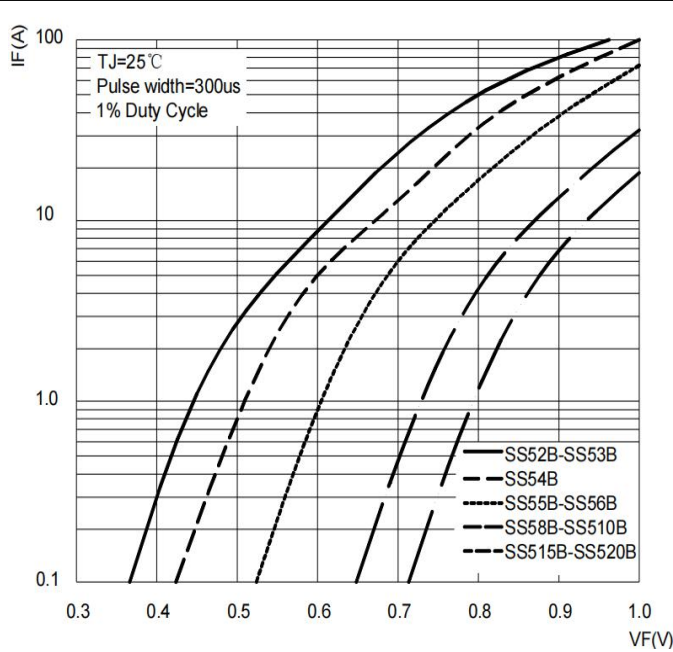
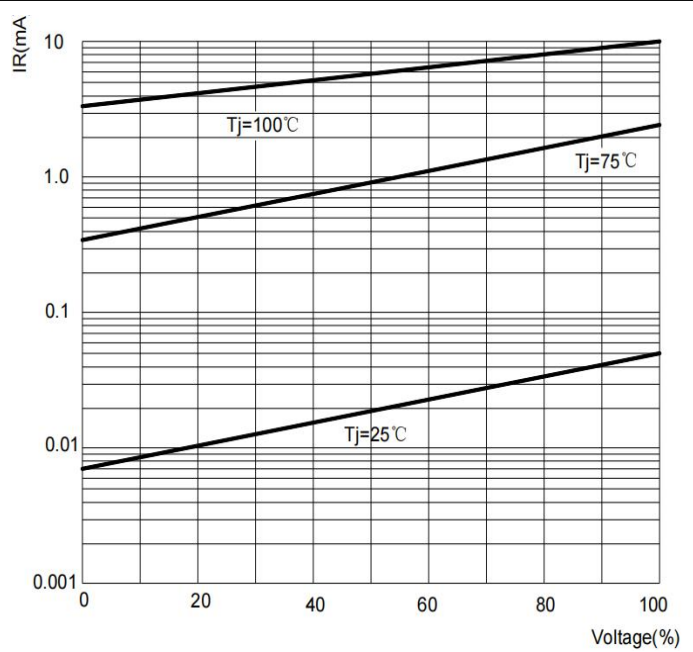


FIG4:Typical Reverse Characteristics



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Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS52B ~ SS520B	DO-214AA(SMB)	3000	6000	48000	13" reel

Outline Dimensions

