

# SS52 THRU SS520

## Schottky Rectifier

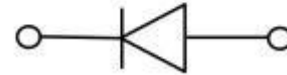
### Features

- Low profile package
- Ideal for automated placement
- 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-214AB(SMC)  
Molding compound meets UL 94 V-0 flammability rating,RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

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

PARAMETER	Symbol	Unit	Conditions	SS 52	SS 53	SS 54	SS 55	SS 56	SS 58	SS 510	SS 515	SS 520
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 sine wave, 1 cycle, Ta=25°C	100								
Storage Temperature	$T_{stg}$	°C		-55 ~ +125				-55 ~ +150				
Junction Temperature	$T_j$	°C		-55 ~ +150								

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

PARAMETER	Symbol	Unit	Conditions	SS 52	SS 53	SS 54	SS 55	SS 56	SS 58	SS 510	SS 515	SS 520
Peak Forward Voltage	$V_{FM}$	V	$I_{FM} = 5.0A$	0.55		0.6	0.70		0.85		0.90	
Peak Reverse Current	$I_{RRM1}$	mA	$V_{RM} = V_{RRM}$	Ta=25°C		0.1						
	$I_{RRM2}$			Ta=100°C		50						
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	Between junction and ambient	60 <sup>1)</sup>								
	$R_{\theta J-L}$		Between junction and terminal	20 <sup>1)</sup>								

#### Notes:

<sup>1)</sup>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

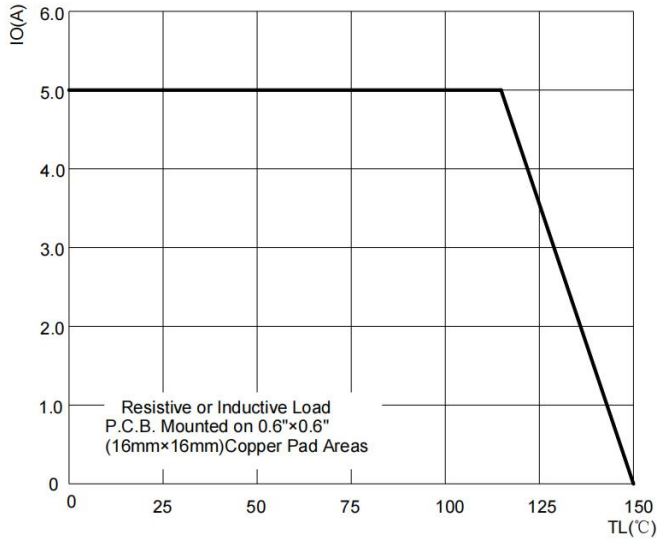


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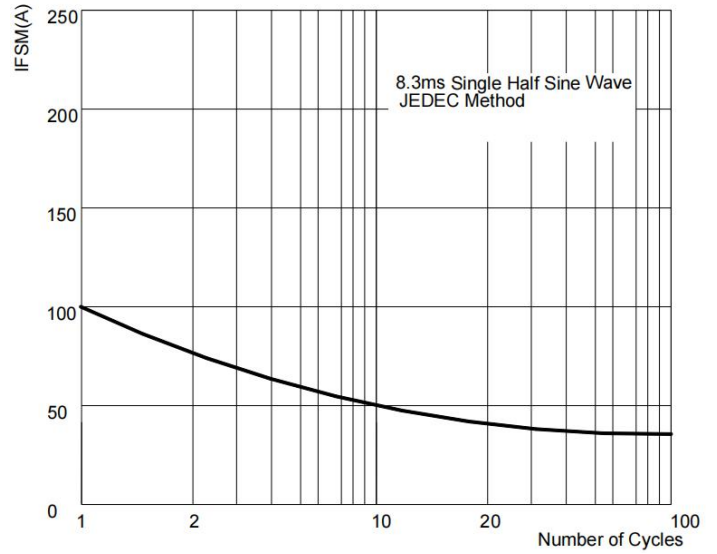
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■ Characteristics (Typical)

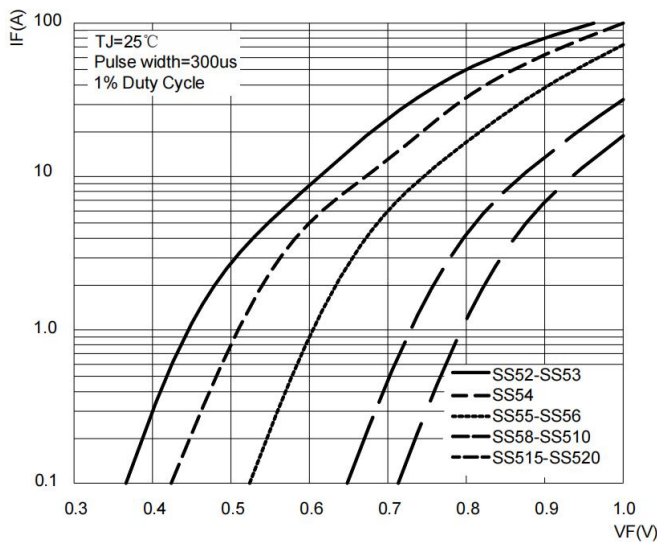
**FIG1: Forward Current Derating Curve**



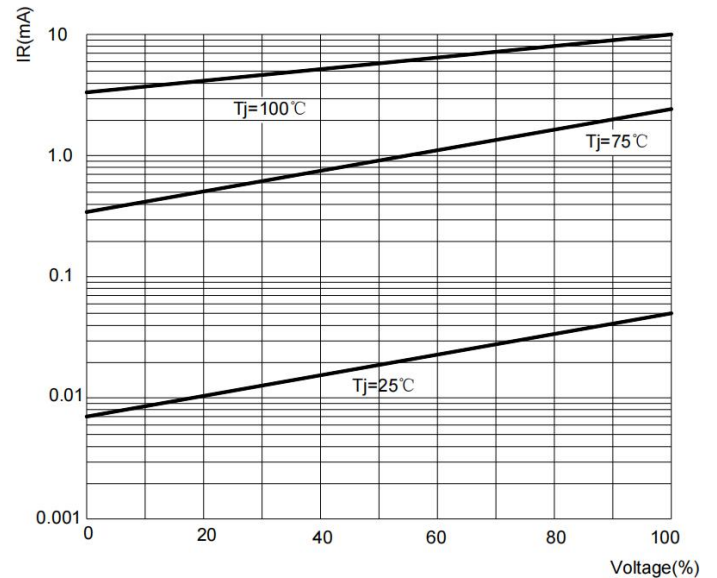
**FIG2: Maximum Non-Repetitive Forward Surge Current**



**FIG3: Typical Forward Characteristics**



**FIG4: Typical Reverse Characteristics**



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### Ordering Information (Example)

PREFERRED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS52~SS520	DO-214AB(SMC)	3000	6000	42000	13" reel

### Outline Dimensions

