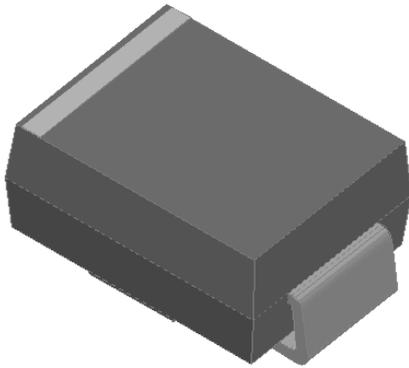


## Surface Mount Schottky Rectifier

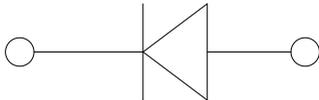


### Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low VF
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.



### Mechanical Data

- **Package:** DO-214AA (SMB)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **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	SS54L	SS545L	SS56L	SS510L
Device marking code			SS54L	SS545L	SS56L	SS510L
Repetitive peak reverse voltage	VRRM	V	40	45	60	100
Average rectified output current @60Hz sine wave, resistance load, Ta (FIG.1)	IO	A	5.0			
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Ta=25°C	IFSM	A	100			
Storage temperature	Tstg	°C	-55 ~+150			
Junction temperature	Tj	°C	-55 ~+150			

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

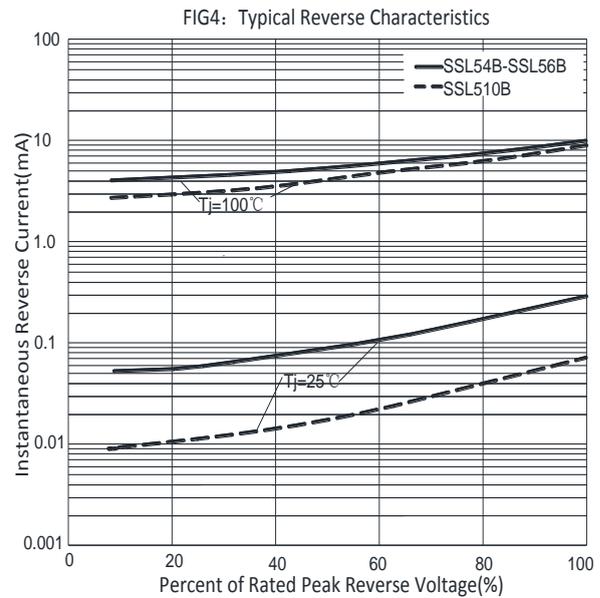
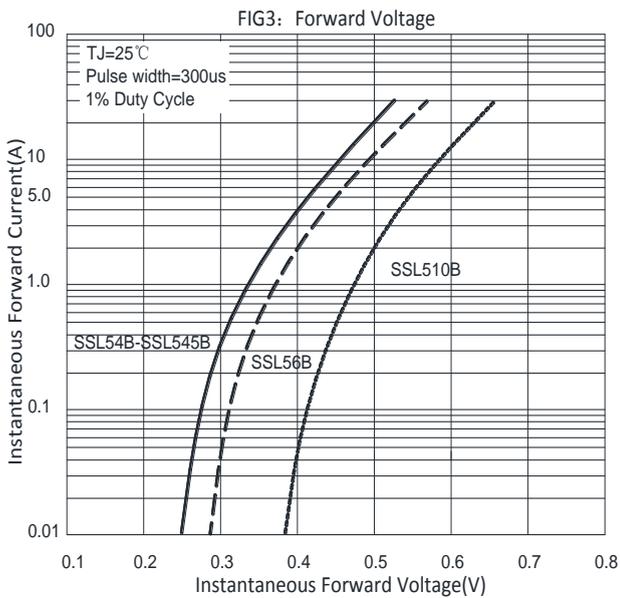
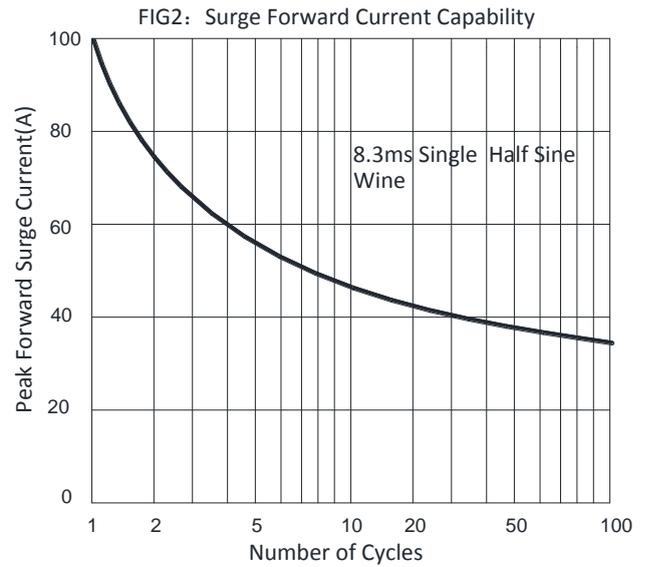
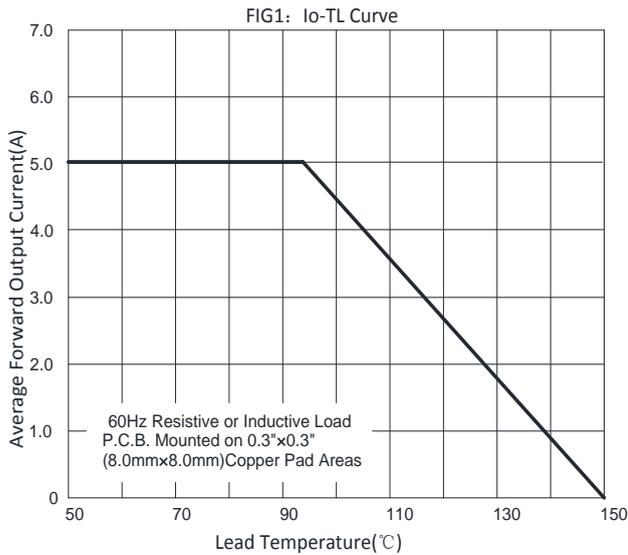
PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS54L	SS545L	SS56L	SS510L
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=5.0A	0.45		0.50	0.70
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	IRRM	mA	Ta=25°C	0.5			0.1
			Ta=100°C	10			9

■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

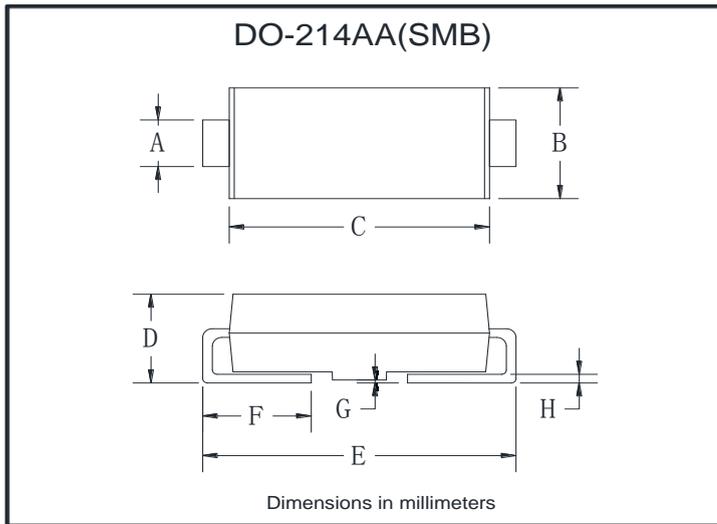
PARAMETER	SYMBOL	UNIT	SSL54B	SSL545B	SSL56B	SSL510B
Thermal resistance	R <sub>θJ-A</sub>	°C/W	65 <sup>(1)</sup>			
	R <sub>θJ-L</sub>		16 <sup>(1)</sup>			

Note:  
 (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

■ Characteristics(Typical)

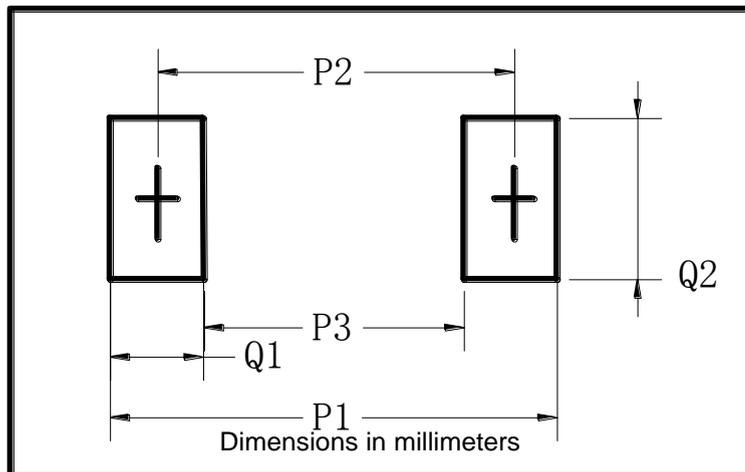


■ Outline Dimensions



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.15
B	3.30	3.94
C	4.25	4.75
D	1.99	2.61
E	5.21	5.59
F	0.90	1.41
G	0.10	0.20
H	0.15	0.31

■ Suggested pad layout



DO-214AA(SMB)	
Dim	Millimeters
P1	6.8
P2	4.3
P3	1.8
Q1	2.5
Q2	2.3