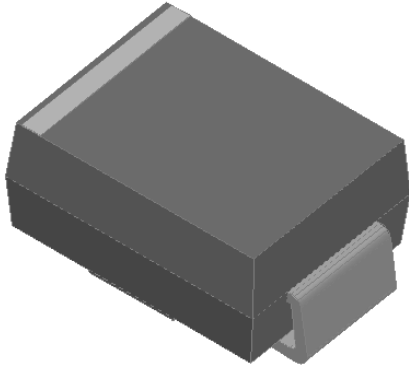


Surface Mount Schottky Rectifier

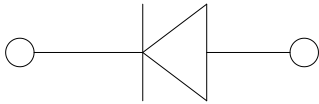


Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- 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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS120
Device marking code			SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS120
Repetitive peak reverse voltage	VRRM	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, resistance load, T _a (FIG.1)	I _O	A	1.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	50								
Storage temperature	T _{stg}	°C	-55 ~+150								
Junction temperature	T _j	°C	-55~+125				-55 ~+150				

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS120
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	0.55			0.70		0.85		0.90	
Maximum DC reverse current at rated DC blocking voltage per diode@ VRM=VRRM	I _{RRM}	mA	T _a =25°C	0.50					0.10			
			T _a =100°C	10					5			

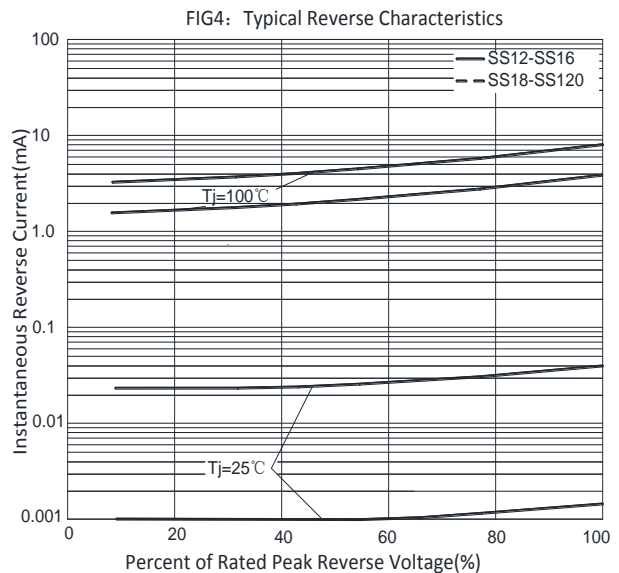
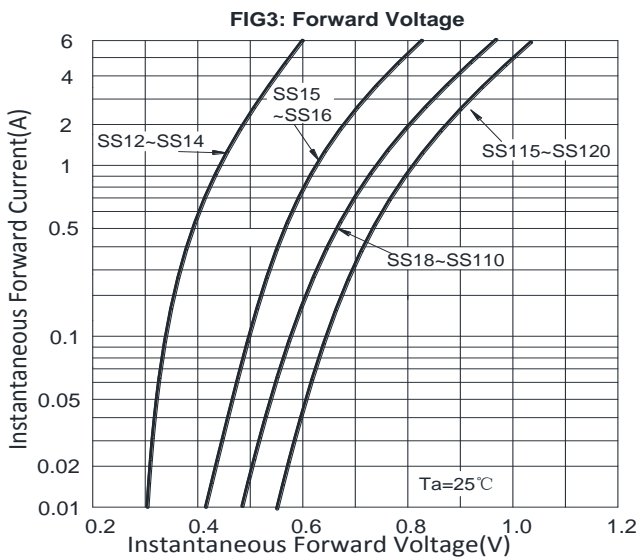
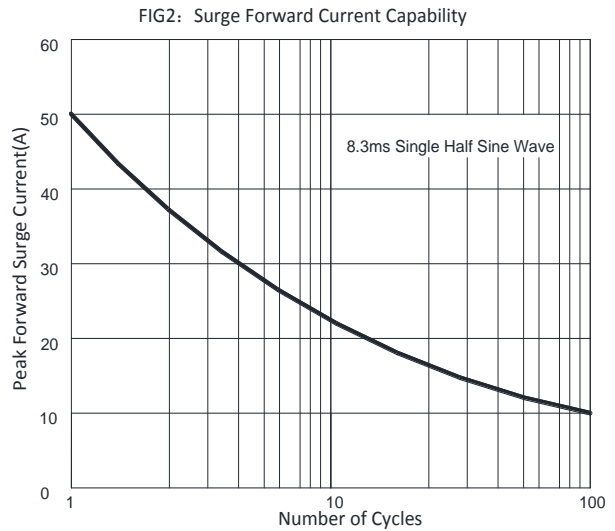
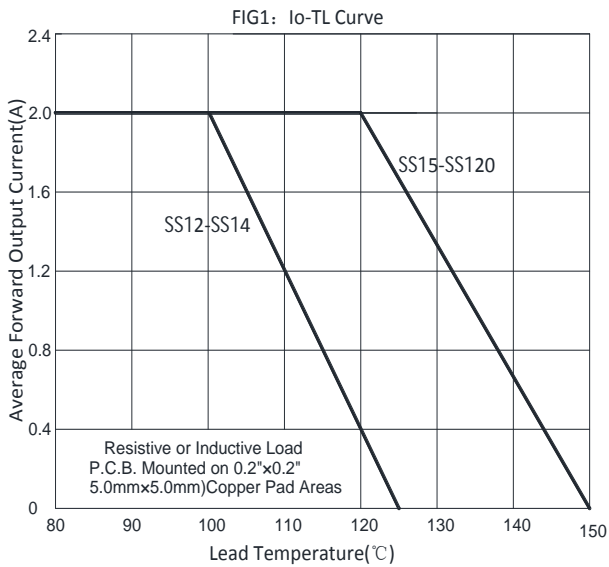
SS12 THRU SS120

■ Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS120
Thermal resistance	$R_{\theta J-A}^{(1)}$	$^\circ\text{C}/\text{W}$	75 ⁽¹⁾								
	$R_{\theta J-L}^{(1)}$		17 ⁽¹⁾								

Note:
 (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ Characteristics(Typical)

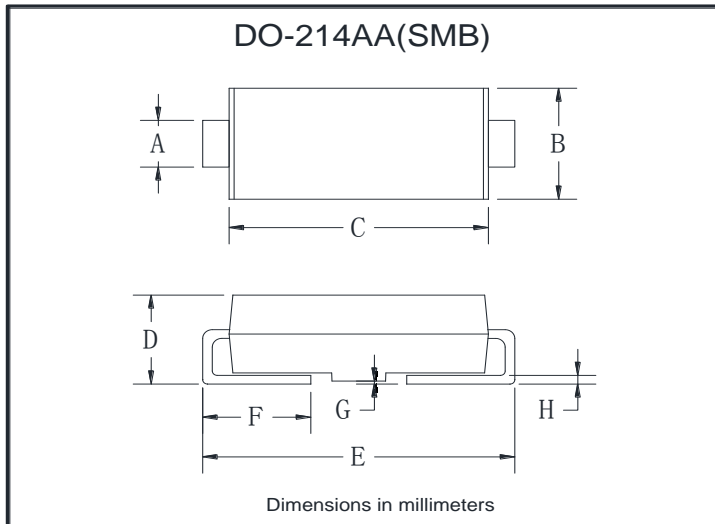


SS12 THRU SS120

Ordering Information (Example)

P/N	PKG	QTY
SS12-SS120	SMB(DO-214AA)	3000

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