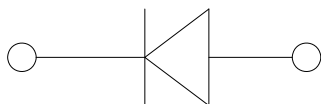


Surface Mount Schottky Rectifier



Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low V_F
- 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, -compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■Maximum Ratings ($T_j=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SSL58B
Device marking code			SSL58B
Repetitive peak reverse voltage	V_{RRM}	V	80
Average rectified output current @60Hz sine wave, resistance load, TL (FIG.1)	I_O	A	5.0
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, $T_j=25^{\circ}\text{C}$	I_{FSM}	A	120
Storage temperature	T_{stg}	$^{\circ}\text{C}$	-55 ~+150
Junction temperature	T_j	$^{\circ}\text{C}$	-55 ~+150

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SSL58B
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=5.0\text{A}$	0.58
Maximum DC reverse current at rated DC blocking voltage per diode @ $V_{RM}=V_{RRM}$	I_{RRM}	mA	$T_j=25^{\circ}\text{C}$	0.1
			$T_j=100^{\circ}\text{C}$	10

Note1:Pulse test:300uS pulse width,1% duty cycle

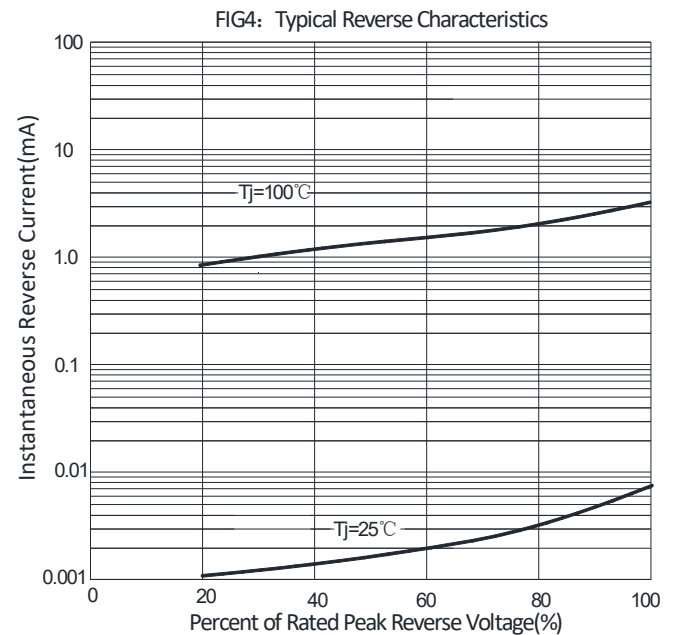
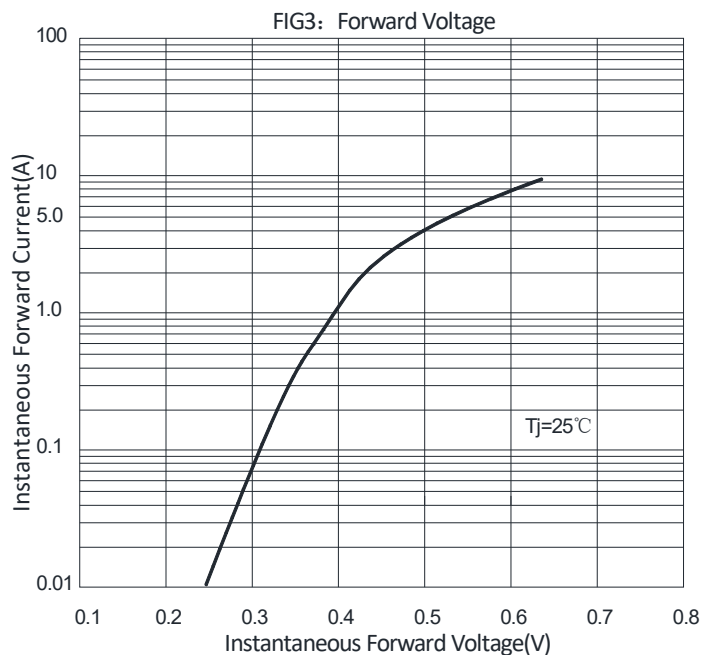
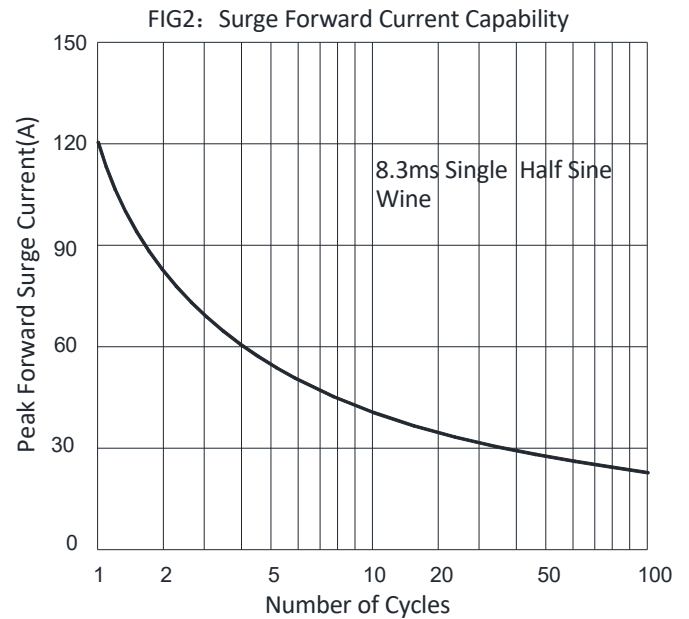
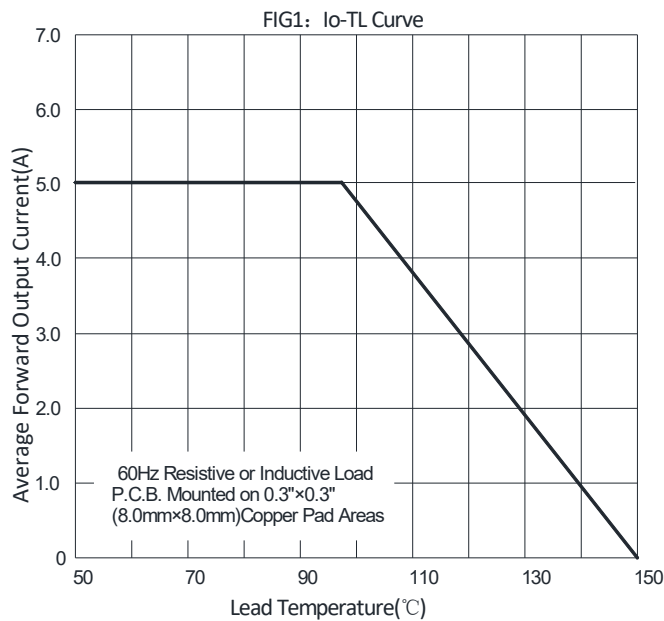
Note2:Pulse test:pulse width 40mS

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

PARAMETER	SYMBOL	UNIT	SSL58B
Thermal resistance	R _{θJA}	°C/W	65 ⁽¹⁾
	R _{θJL}		16 ⁽¹⁾
	R _{θJC}		15 ⁽¹⁾

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

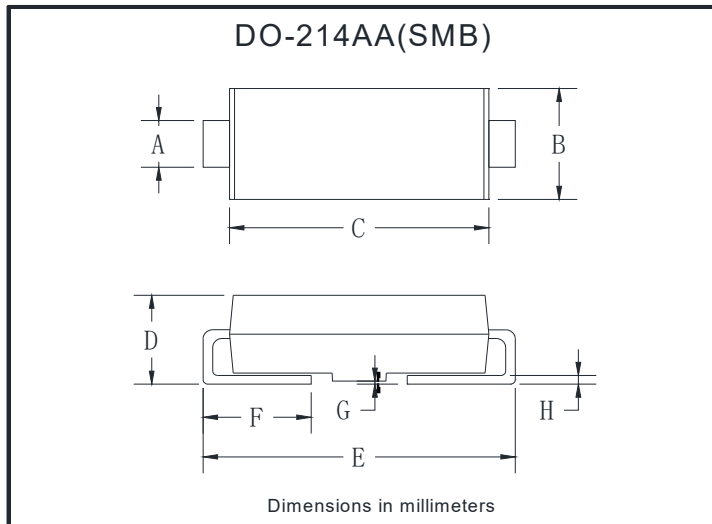
■ Characteristics(Typical)



■ Ordering Information (Example)

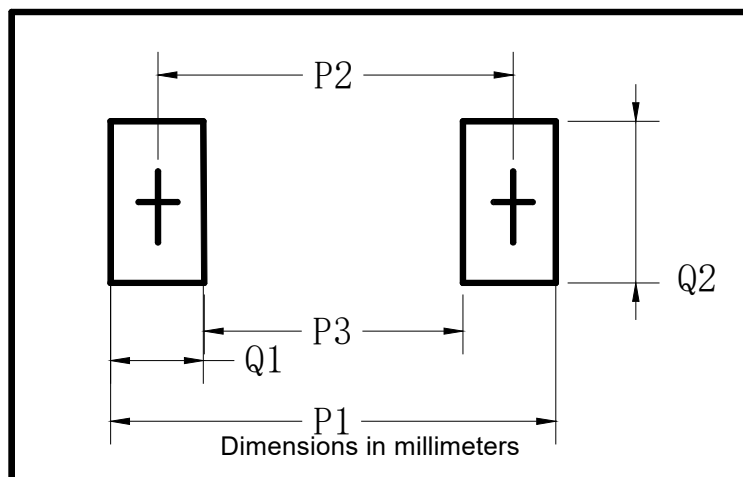
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SSL58B	F1	Approximate 0.096	3000	/	48000	13" reel
SSL58B	F2	Approximate 0.096	750	3000	24000	7" reel
SSL58B	F3	Approximate 0.096	500	2000	16000	7" reel

■ Outline Dimensions



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.15
B	3.30	3.94
C	4.05	4.75
D	1.99	2.61
E	5.21	5.59
F	0.90	1.41
G	0.05	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

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