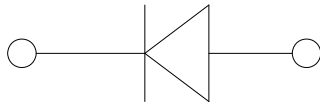
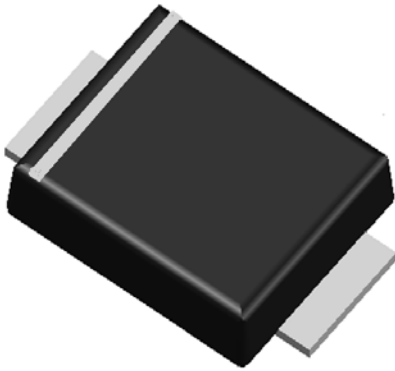


Surface Mount Schottky Rectifier



Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low VF
- 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:** SMBF
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_j=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SSL545BF
Device marking code			SSL545BF
Repetitive peak reverse voltage	V _{RRM}	V	45
Average rectified output current @60Hz sine wave, resistance load, T _c (FIG.1)	I _O	A	5.0
Surge(non-repetitive)forward current @ 60Hz half-sine wave,1 cycle, T _j =25°C	I _{FSM}	A	120
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			240
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	59
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C _j	pF	300
Storage temperature	T _{stg}	°C	-55 ~+150
Junction temperature	T _j	°C	-55 ~+150



SSL545BF

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Peak Forward Voltage	V _F	V	I _{FM} =5.0A T _j =25°C	-	0.43	0.45
			I _{FM} =5.0A T _j =125°C	-	-	0.42
Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =V _{RRM}	I _{RRM}	mA	V _{RM} =V _{RRM} T _j =25°C	-	-	0.5
			V _{RM} =V _{RRM} T _j =125°C	-	-	50

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

Note2:Pulse test:pulse width 40mS

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

PARAMETER	SYMBOL	UNIT	SSL545BF
Typical Thermal resistance	R _{θJ-A} ⁽¹⁾	°C/W	65
	R _{θJ-L} ⁽¹⁾		25
	R _{θJ-C} ⁽¹⁾		15

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)

FIG1: I_o-T_c Curve

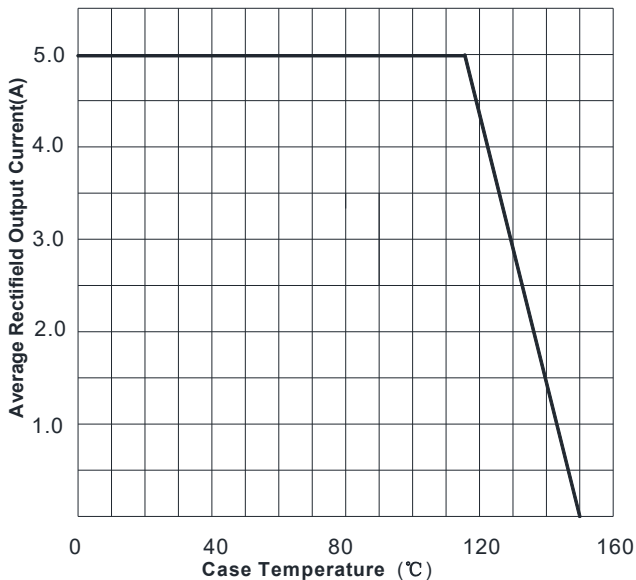


FIG2: Surge Forward Current Capability

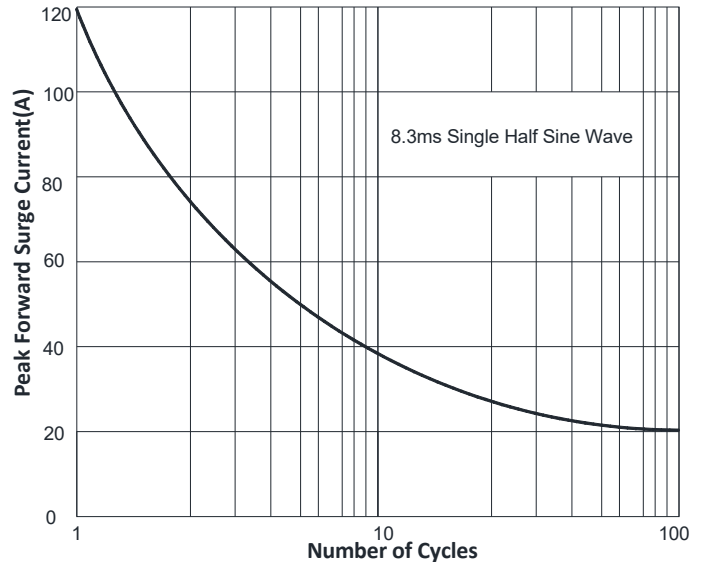


FIG3: Typical Forward Voltage

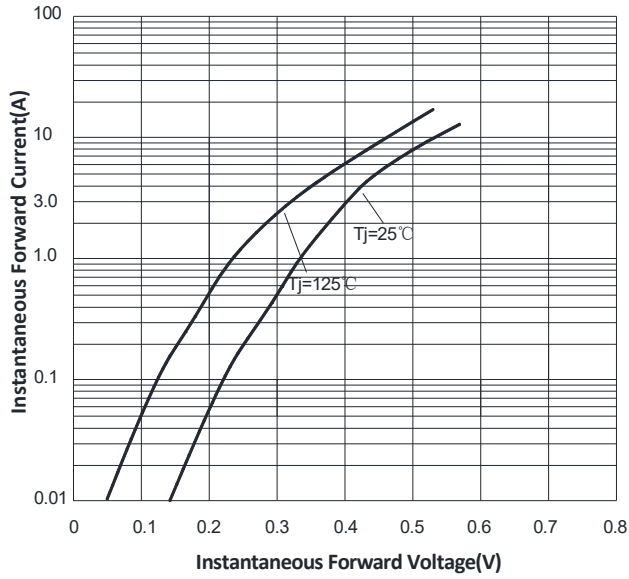
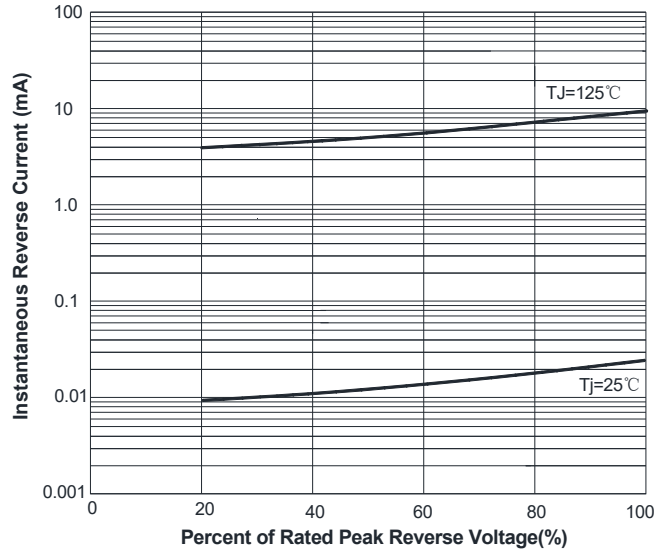


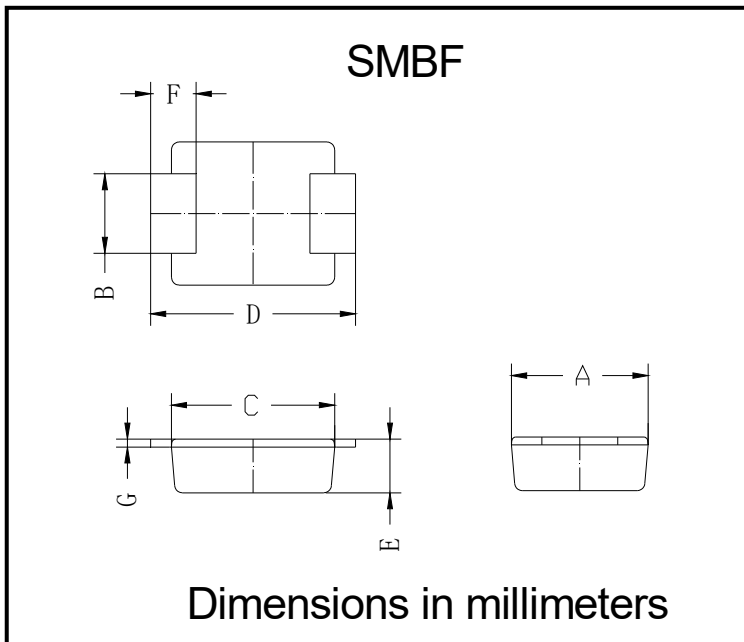
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Ordering Information (Example)

PREFERRED P/N	PACKING CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SSL545BF	F1	5000	/	80000	13" reel

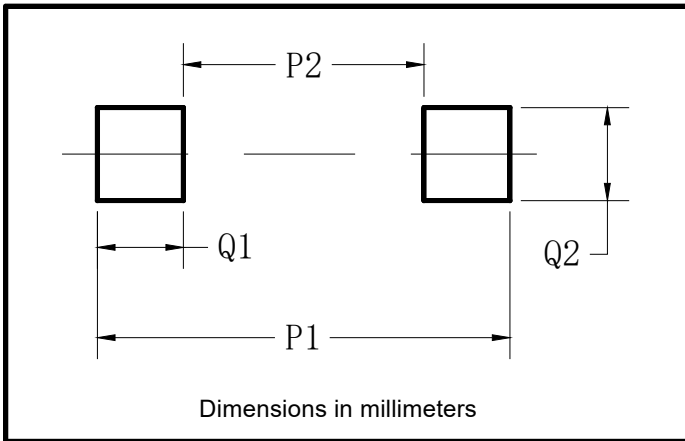
Outline Dimensions



SMBF		
Dim	Min	Max
A	3.40	3.80
B	1.90	2.10
C	4.15	4.45
D	5.10	5.60
E	1.05	1.55
F	0.70	1.35
G	0.15	0.25



■Suggested Pad Layout



Dim	Milimeters
P1	6.20
P2	2.40
Q1	1.90
Q2	2.20



SSL545BF

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.