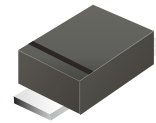


SS10100LBF-HF

RoHS Device

Halogen Free

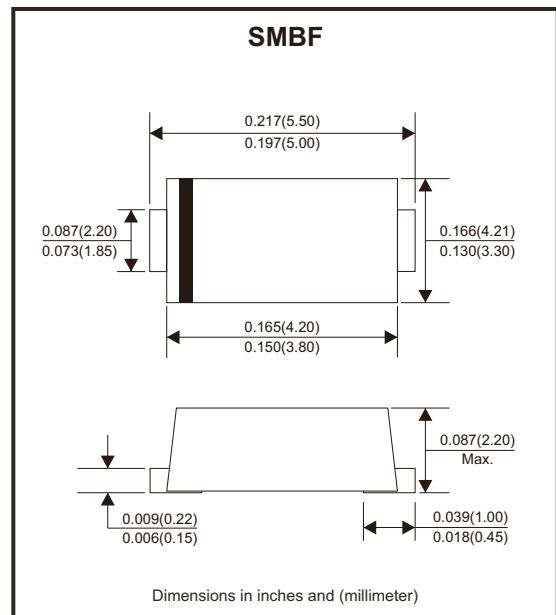


Features

- Metal silicon junction, majority carrier conduction.
- Low forward voltage drop.
- Low forward surge current capability.
- Robust guarding for over voltage protection.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- High temperature soldering:
260°C/10 seconds at terminals.

Mechanical data

- Case: SMBF, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.



Circuit Diagram



Maximum Ratings and Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbols	SS10100LBF-HF	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current	I_O	10	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	130	A
Maximum instantaneous forward voltage at 10A (Note 1)	V_F	0.7	V
Maximum DC reverse current at rated DC blocking voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I_R	0.5 5	mA
Typical thermal resistance from junction to lead (Note 2)	$R_{\theta JL}$	19	$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150	$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}C$

Notes: 1. Pulse test: 300μs pulse width, 1% duty cycle.

2. Device mounted on P.C.B with 10mm x 20mm x 0.1mm copper pad area.

Typical Rating and Characteristic Curves (SS10100LBF-HF)

Fig.1 - Forward Current Derating Curve

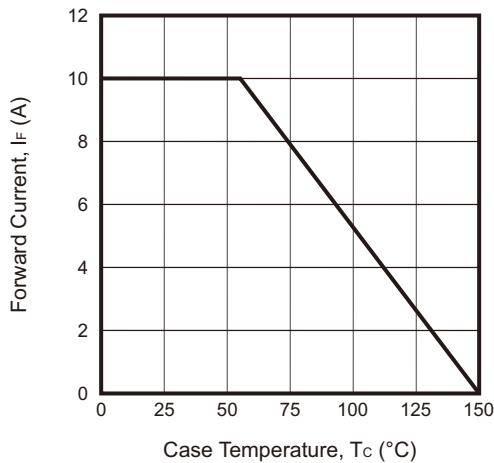


Fig.2 - Typical Junction Capacitance

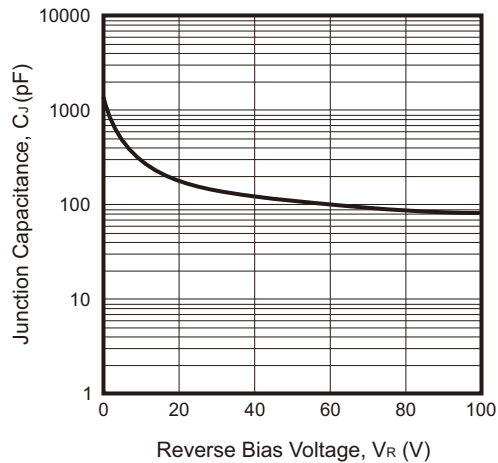


Fig.3 - Typical Reverse Characteristics

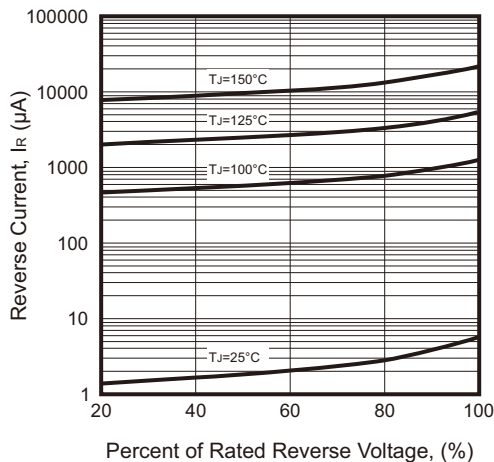
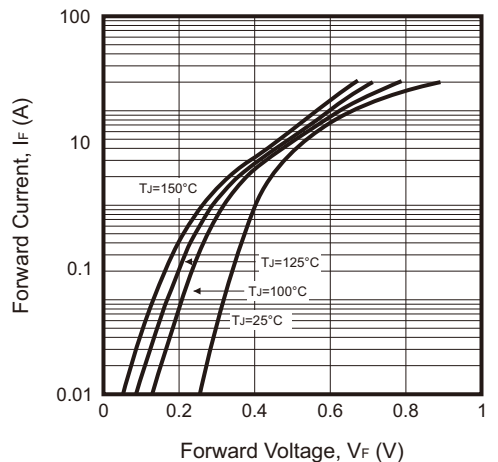
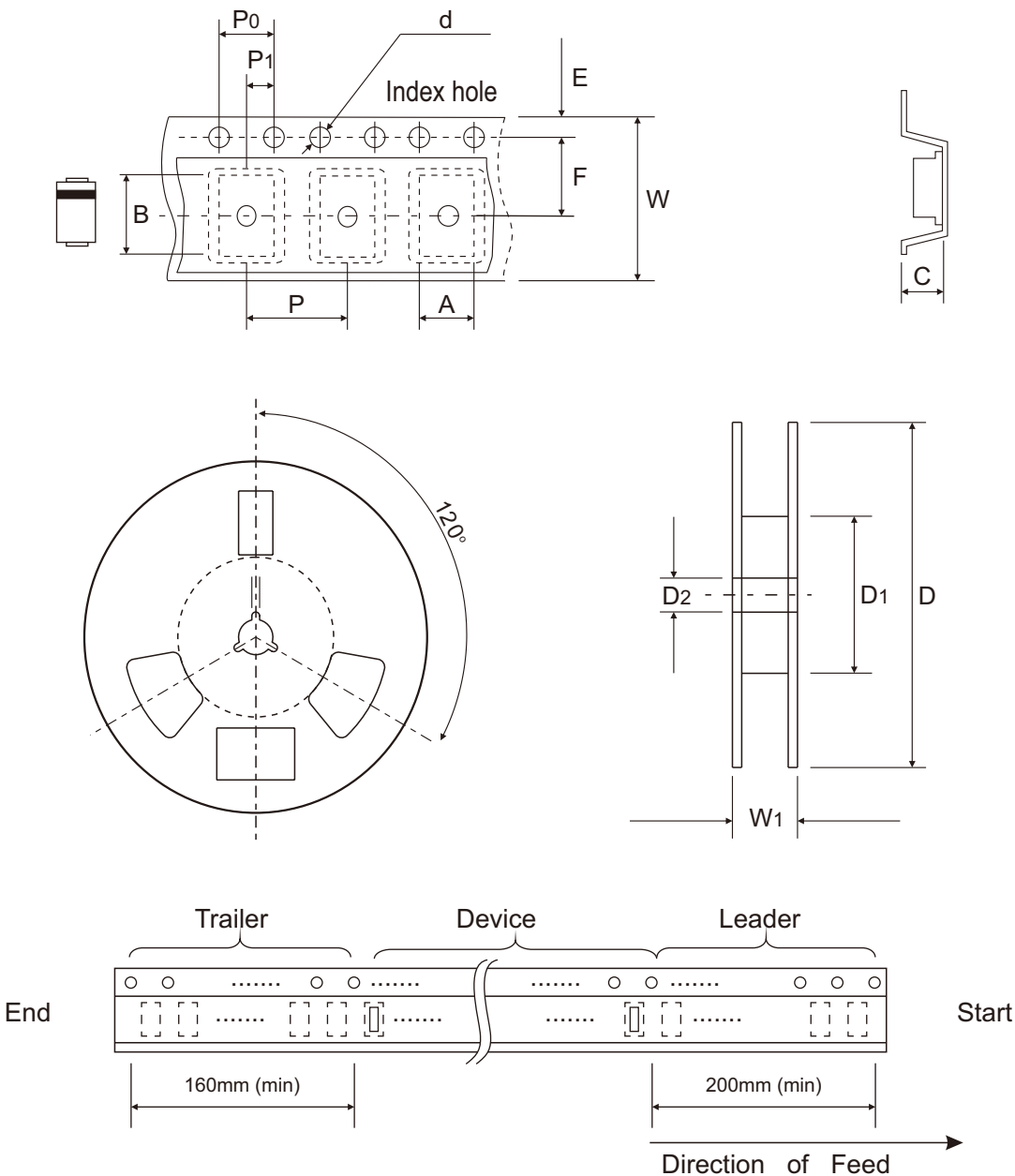


Fig.4 - Typical Forward Characteristics



Reel Taping Specification



SMBF	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	4.55 ± 0.10	6.20 ± 0.10	2.50 Max.	1.55 ± 0.10	330.00 Max.	50.00 Min.	13.00 ± 1.00
	(inch)	0.179 ± 0.004	0.244 ± 0.004	0.098 Max.	0.061 ± 0.004	12.992 Max.	1.969 Min.	0.512 ± 0.039

SMBF	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.00 ± 0.30	18.40 Max.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.012	0.724 Max.

Marking Code

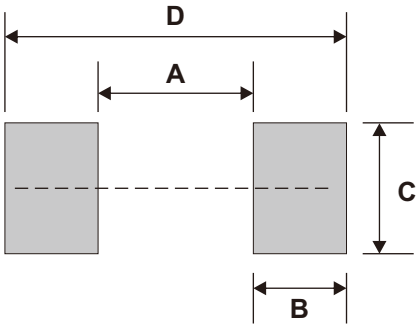
Part Number	Marking Code
SS10100LBF-HF	S10F100



 = Cathode band

Suggested P.C.B. PAD Layout

SIZE	SMBF	
	(mm)	(inch)
A	3.00	0.118
B	1.80	0.071
C	2.54	0.100
D	6.60	0.260



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SMBF	3,000	13