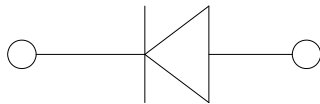
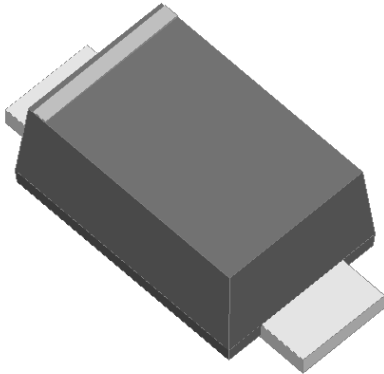


## Surface Mount Schottky Rectifier



### 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:** SOD-323FL  
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<sub>j</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FM110
Device marking code			<b>FM110</b>
Repetitive peak reverse voltage	VRRM	V	100
Average rectified output current @60Hz sine wave, Resistance load, T <sub>c</sub> (FIG.1)	I <sub>O</sub>	A	1.0
Surge(non-repetitive)forward current @ 60Hz half-sine wave, 1 cycle, T <sub>j</sub> =25°C	IFSM	A	25
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C			50
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	2.60
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	pF	40
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150
Junction temperature	T <sub>j</sub>	°C	-55 ~+150



## ■Electrical Characteristics (T<sub>j</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Peak Forward Voltage	V <sub>FM</sub>	V	I <sub>FM</sub> =1.0A T <sub>j</sub> =25°C	-	0.78	0.85
			I <sub>FM</sub> =1.0A T <sub>j</sub> =125°C	-	-	0.70
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R<sub>RM1</sub></sub>	mA	V <sub>RM</sub> =V <sub>R<sub>RM</sub></sub> T <sub>j</sub> =25°C	-	-	0.20
	I <sub>R<sub>RM2</sub></sub>		V <sub>RM</sub> =V <sub>R<sub>RM</sub></sub> T <sub>j</sub> =125°C	-	-	30

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

Note2:Pulse test:pulse width 40mS

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

PARAMETER	SYMBOL	UNIT	FM110
Thermal Resistance	R <sub>θJ-A</sub>	°C/W	90 <sup>①</sup>
	R <sub>θJ-c</sub>		46 <sup>①</sup>

Note:  
(1) Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm\*3mm copper pad areas.

## ■ Characteristics(Typical)

FIG1:Io-Tc Curve

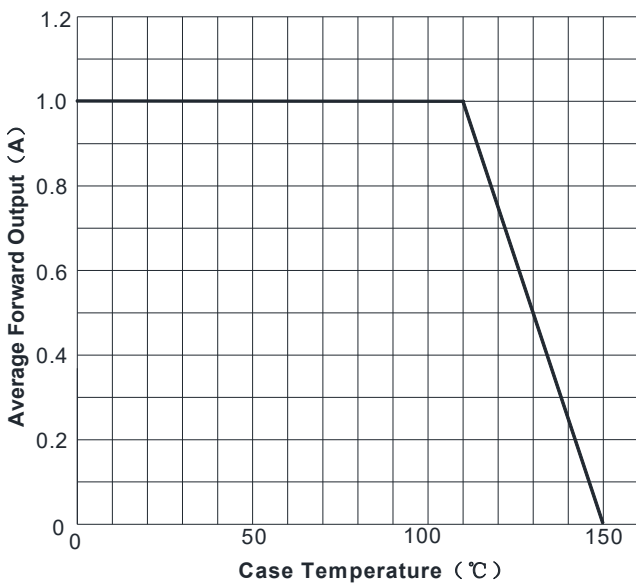
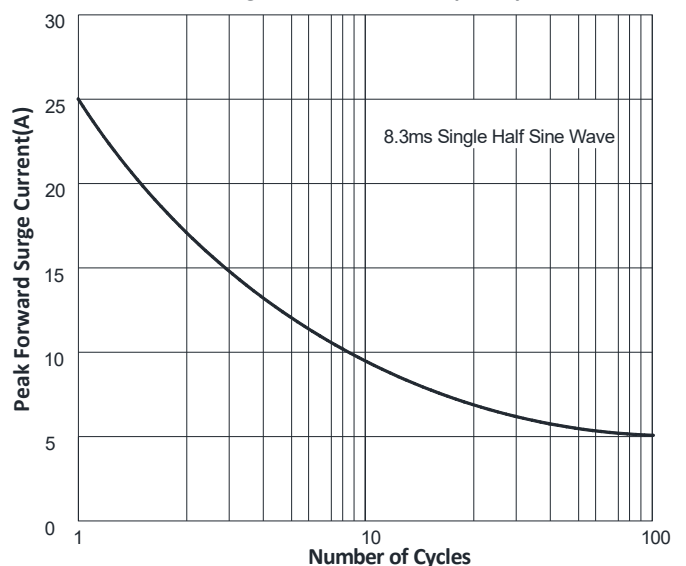
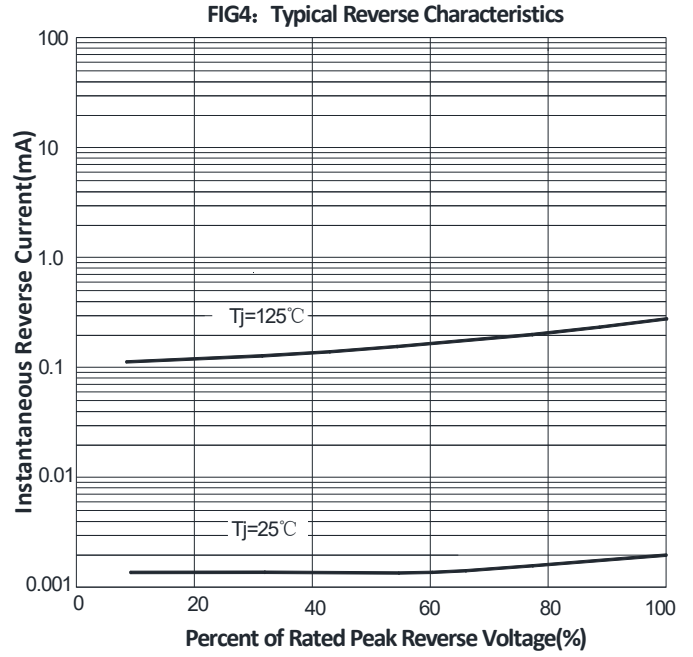
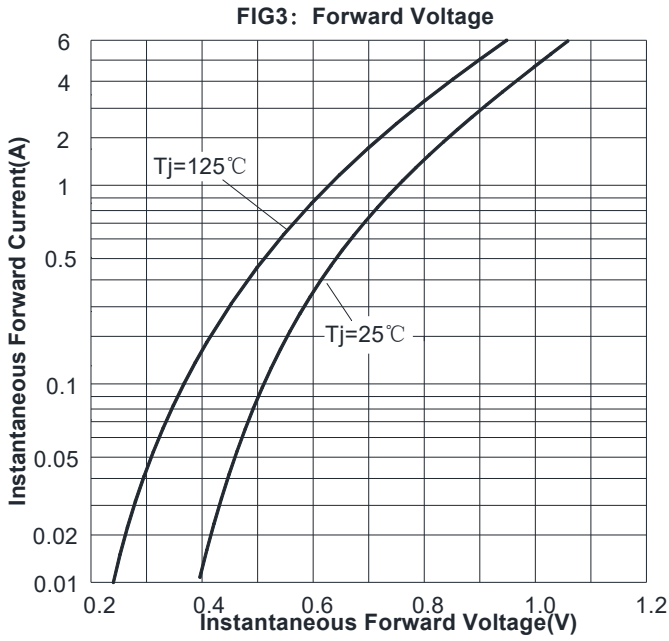
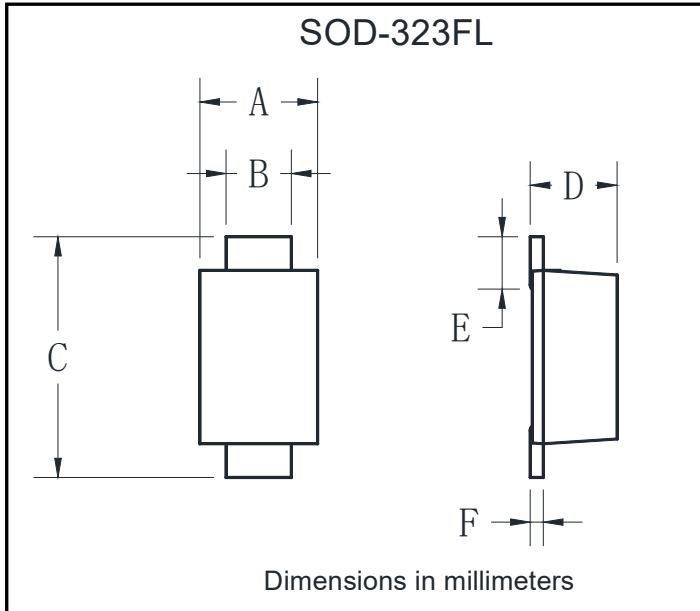


FIG2: Surge Forward Current Capability

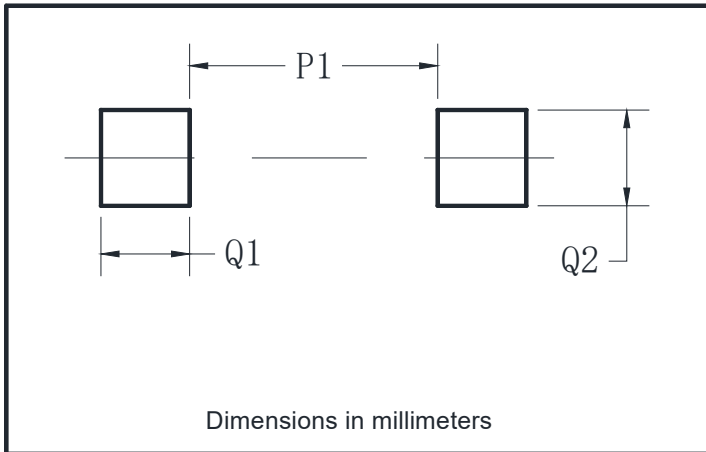




## ■ Outline Dimensions



SOD-323FL		
Dim	Min	Max
A	1.05	1.45
B	0.90	1.15
C	2.30	2.70
D	0.80	1.20
E	0.25	0.70
F	0.05	0.25

**■ Suggested pad layout**

SOD-323FL	
Dim	Millimeters
P1	1.30
Q1	1.00
Q2	1.50



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