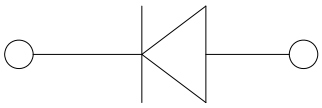
Surface Mount Schottky Rectifier





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 Date

- ● **Package**: SOD-323HE
  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 (Tj=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FM24E
Device marking code			**24**
Repetitive peak reverse voltage	V_{RRM}	V	40
Average rectified output current @60Hz sine wave, Resistance load,TL (FIG.1)	I_O	A	2.0
Surge(non-repetitive)forward current @ 60Hz half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	35
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			70
Current squared time @1ms≤t≤8.3ms Tj =25℃，Rating of per diode	I2t	A2S	5.08
Storage temperature	T_{stg}	℃	-55 ~+150
Junction temperature	T_j	℃	-55 ~+150

■Electrical Characteristics（T_j=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Peak Forward Voltage	VF	V	I_{FM}=2.0A Tj=25℃	-	0.56	0.60
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I_{RRM1}	mA	V_{RM}=V_{RRM} Tj=25℃	-	-	0.05
	I_{RRM2}		V_{RM}=V_{RRM} Tj=100℃	-	-	10

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

Note2:Pulse test:pulse widh 40mS

■Thermal Characteristics （T_j=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	FM24E
Thermal Resistance	$R_{\theta J-A}$	℃/W	270
	$R_{\theta J-L}$		45

■ Characteristics(Typical)

FIG1:Io-TL Curve

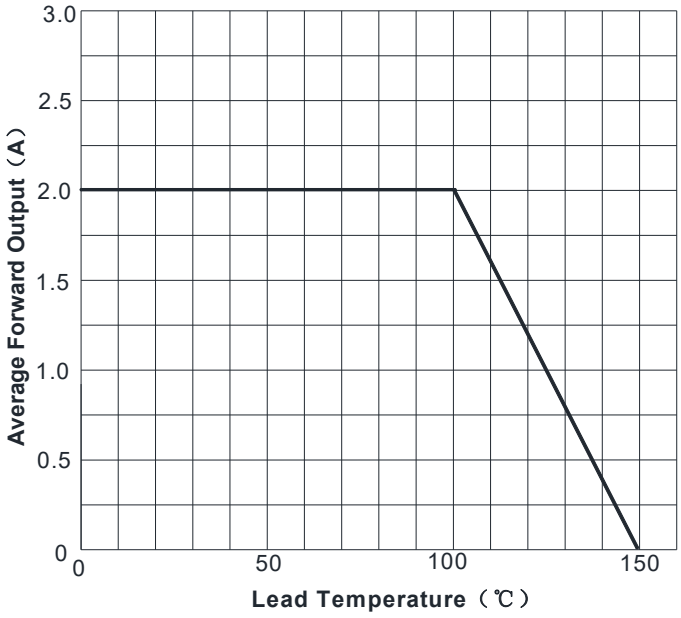


FIG2：Surge Forward Current Capability

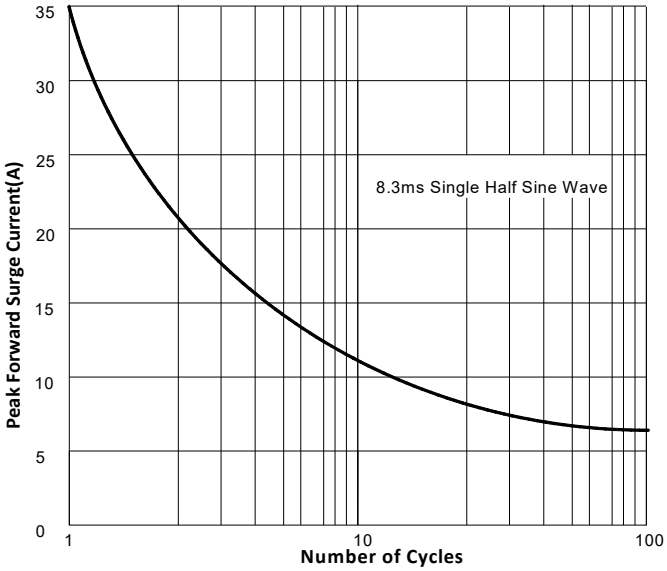


FIG.3: Forward Voltage

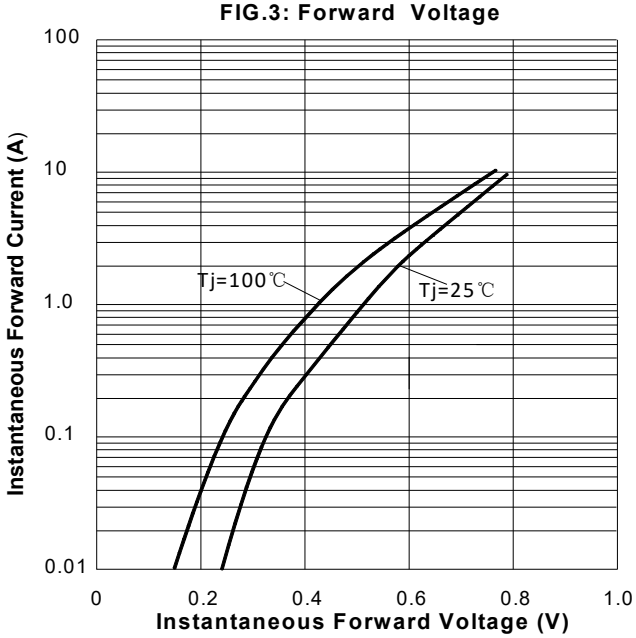
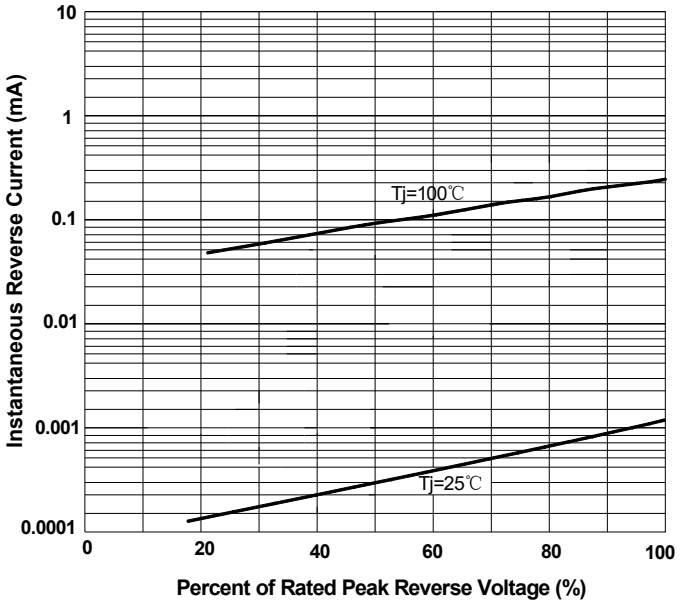


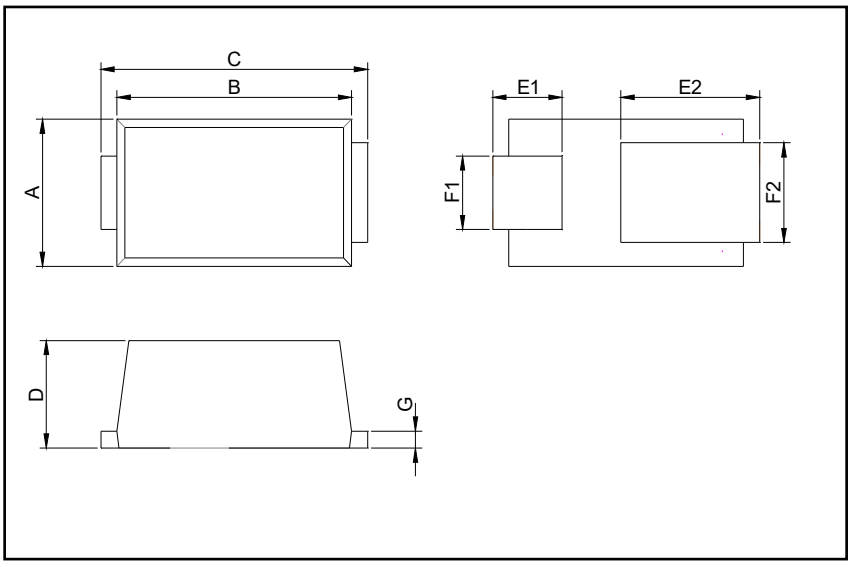
FIG.4: Instantaneous Reverse Characteristics



■Ordering Information (Example)

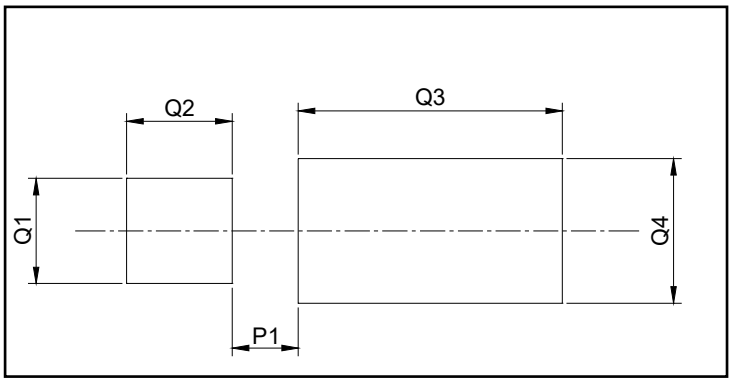
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FM24E	F1	Approximate 0.008	3000	120000	7” reel

■ Outline Dimensions



SOD-323HE		
Dim	Millimeters	
	Min	Max
A	1.2	1.4
B	2.1	2.3
C	2.3	2.7
D	0.9	1.0
E1	0.55	0.75
E2	1.1	1.5
F1	0.55	0.75
F2	0.78	0.98
G	0.12	0.27

■ Suggested pad layout



SOD-323HE	
Dim	Millimeters
P1	0.5
Q1	0.8
Q2	0.8
Q3	2
Q4	1.1

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