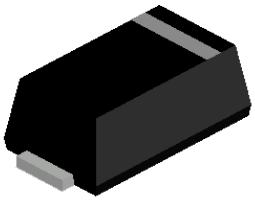
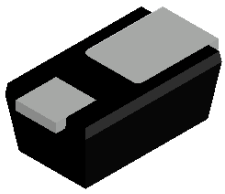
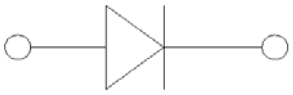
Surface Mount Schottky Rectifier







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 (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FM12E	FM13E	FM14E	FM15E	FM16E	FM18E	FM110E	FM115E	FM120E
Device marking code			12	13	14	15	16	18	110	115	120
Repetitive peak reverse voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, Resistance load, TL (FIG.1)	I_O	A	1.0								
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	30								
Storage temperature	T_{stg}	℃	-55 ~+175								
Junction temperature	T_j	℃	-55 ~+125					-55 ~+175			

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FM12E	FM13E	FM14E	FM15E	FM16E	FM18E	FM110E	FM115E	FM120E
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=1.0A	0.50			0.70		0.85		0.90	
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I_{RRM}	mA	T_a=25℃	0.50					0.10			
			T_a=100℃	10					5			

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

Note2:Pulse test:pulse widh 40mS

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

PARAMETER	SYMBOL	UNIT	FM12E	FM13E	FM14E	FM15E	FM16E	FM18E	FM110E	FM115E	FM120E
Thermal Resistance	$R_{\theta J-A}$	℃/W	270								
	$R_{\theta J-L}$		45								

■ Characteristics (Typical)

FIG1:Io-TLCurve

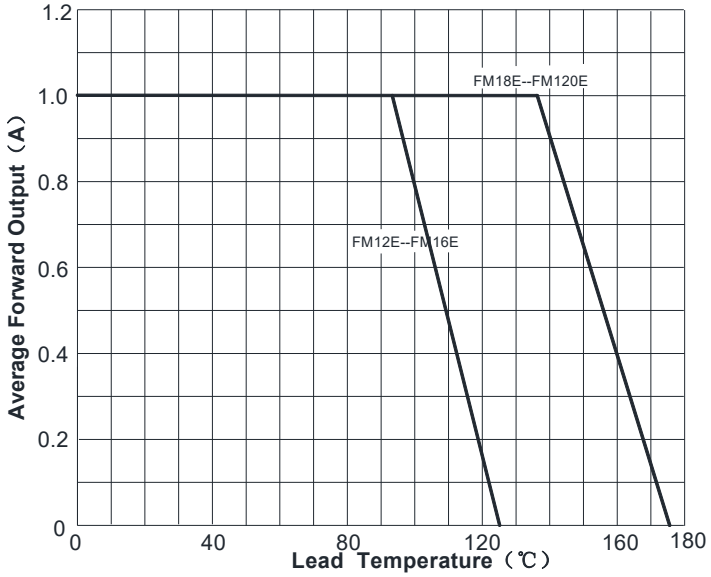


FIG2: Surge Forward Current Capability

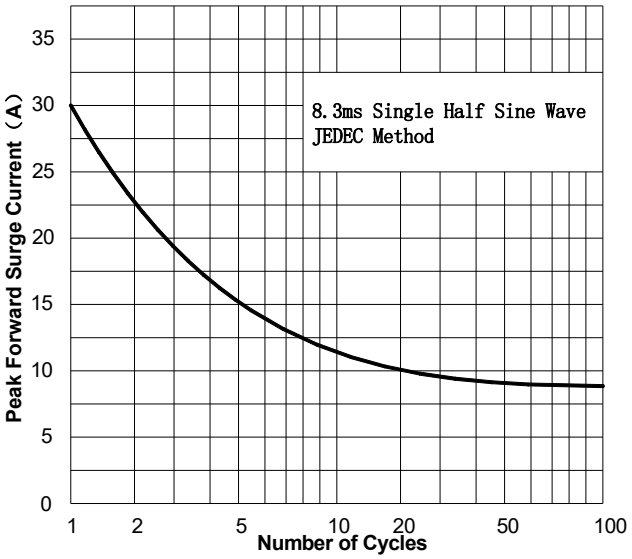


FIG3: Forward Voltage

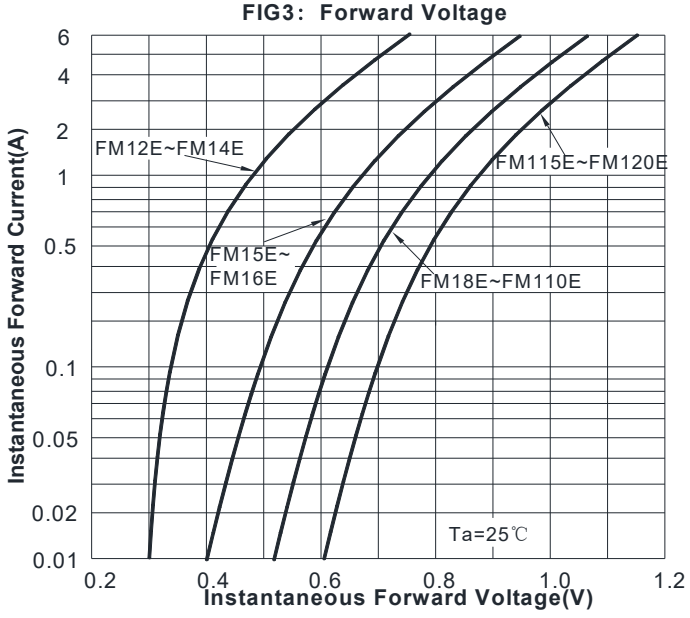
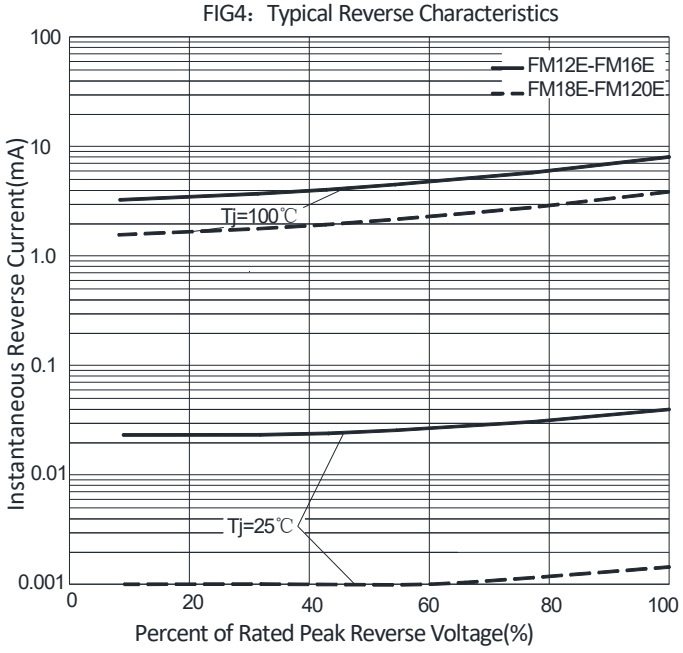


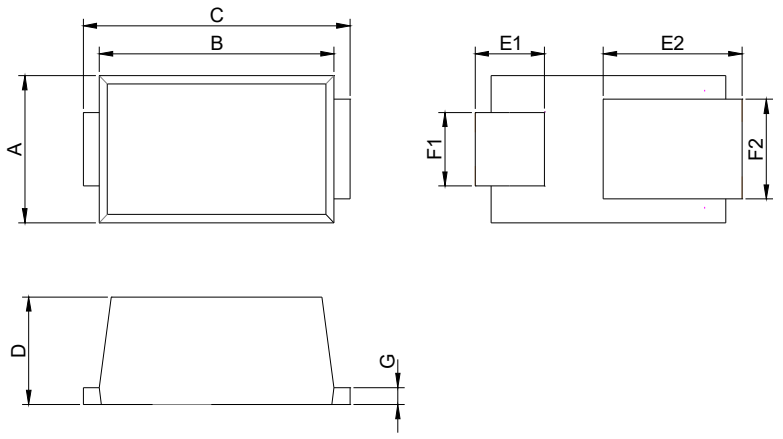
FIG4: Typical Reverse Characteristics



■Ordering Information (Example)

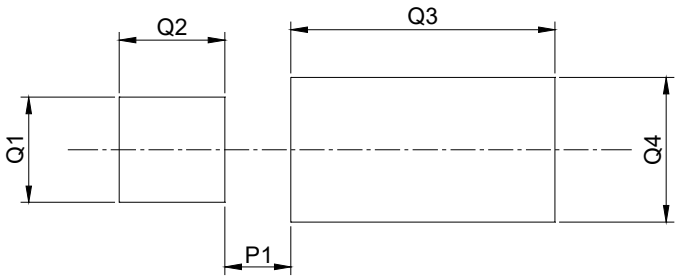
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FM12E THRU FM120E	F1	Approximate 0.008	3000	120000	7” reel

■ 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

Notice

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