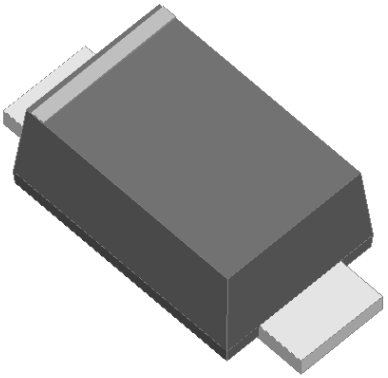
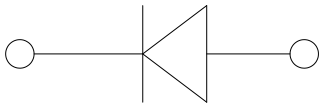
Surface Mount Schottky Rectifier





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-123FL
  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	DSK12	DSK13	DSK14	DSK15	DSK16	DSK18	DSK110	DSK115	DSK120
Device marking code			K12	K13	K14	K15	K16	K18	K110	K115	K120
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, Ta (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 ~+150								
Junction temperature	T_j	℃	-55 ~+125			-55 ~+150					

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DSK12	DSK13	DSK14	DSK15	DSK16	DSK18	DSK110	DSK115	DSK120
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=1.0A	0.55			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			

■ **Characteristics** (Typical)

FIG1:Io-TLCurve

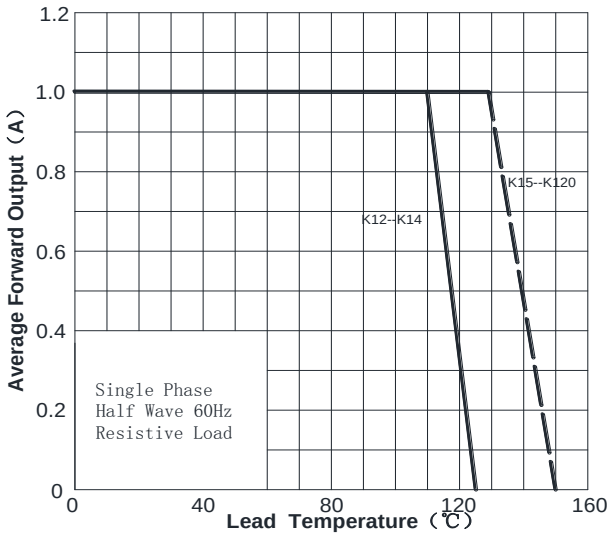


FIG2: Surge Forward Current Capability

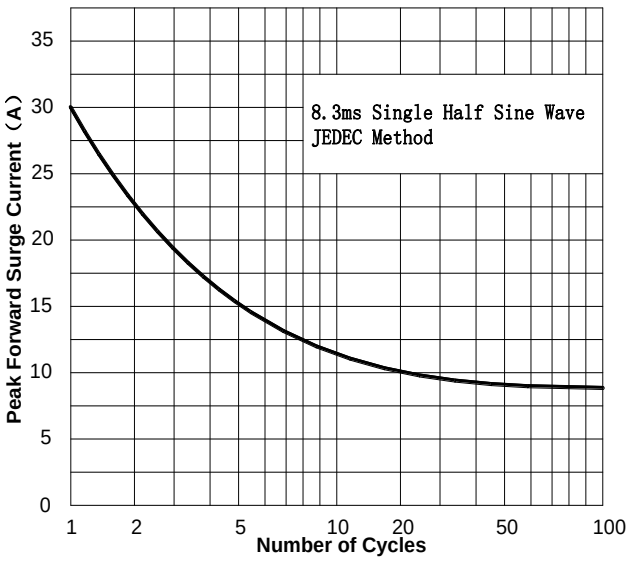


FIG3：Forward Voltage

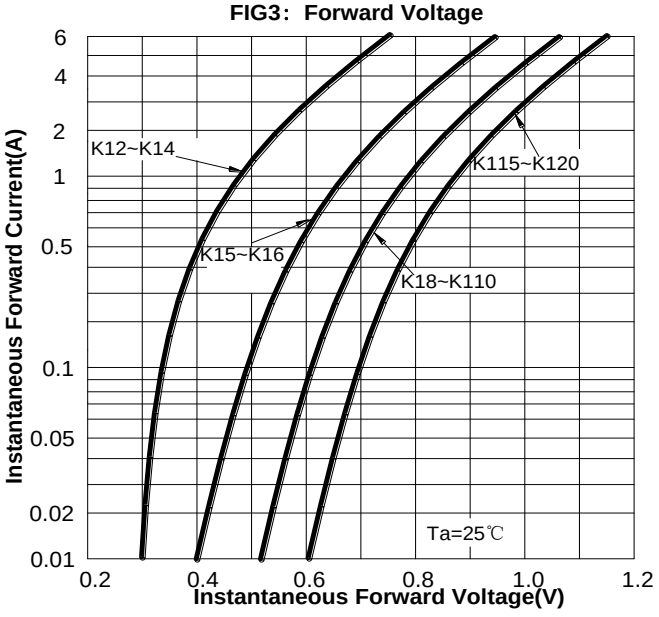
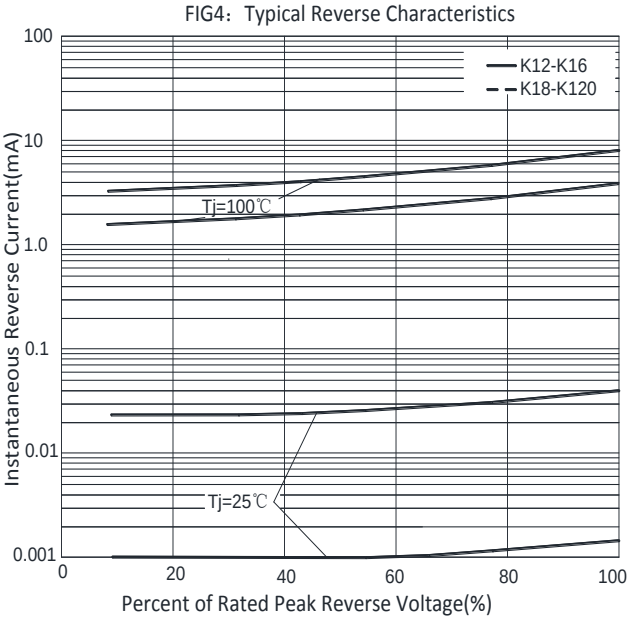


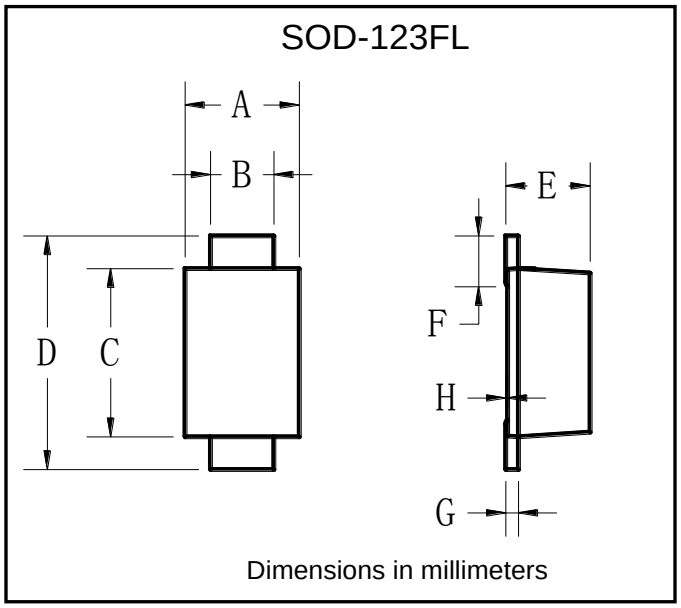
FIG4：Typical Reverse Characteristics



■**Ordering Information** (Example)

P/N	PKG	QTY
DSK12-DSK120	SOD123FL	3000

■ **Outline Dimensions**



SOD-123FL		
Dim	Min	Max
A	1.60	1.90
B	0.90	1.10
C	2.55	2.85
D	3.60	3.90
E	1.00	1.20
F	0.40	0.90
G	0.10	0.25
H	0.02	0.05