

## 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

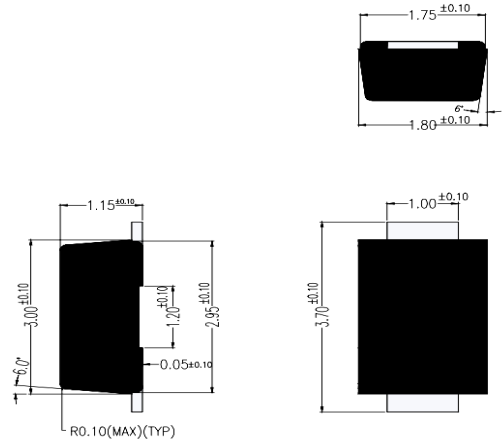
For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

### 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

### SOD-123FL

Unit : inch(mm)



### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	K32	K33	K34	K35	K36	K38	K310	K315	K320	
Repetitive peak reverse voltage	VRRM	V	20	30	40	50	60	80	100	150	200	
Average rectified output current @60Hz sine wave, Resistance load, T <sub>a</sub> (FIG.1)	I <sub>O</sub>	A	3.0									
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	65									
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150									
Junction temperature	T <sub>j</sub>	°C	-55 ~+150					-55 ~+175				
Typical Junction Capacitance measured at 1MHz and Applied on 4.0VD.C	C <sub>j</sub>	pF	165									

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	K32	K33	K34	K35	K36	K38	K310	K315	K320
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =3.0A	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I <sub>RRM</sub>	mA	T <sub>a</sub> =25°C	0.5					0.1			
			T <sub>a</sub> =100°C	10					5			

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

PARAMETER	SYMBOL	UNIT	K32	K33	K34	K35	K36	K38	K310	K315	K320
Thermal Resistance	R <sub>θJ-A</sub>	°C/W	70 <sup>1)</sup>								
	R <sub>θJ-L</sub>		25 <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: I<sub>o</sub>-T<sub>L</sub> Curve

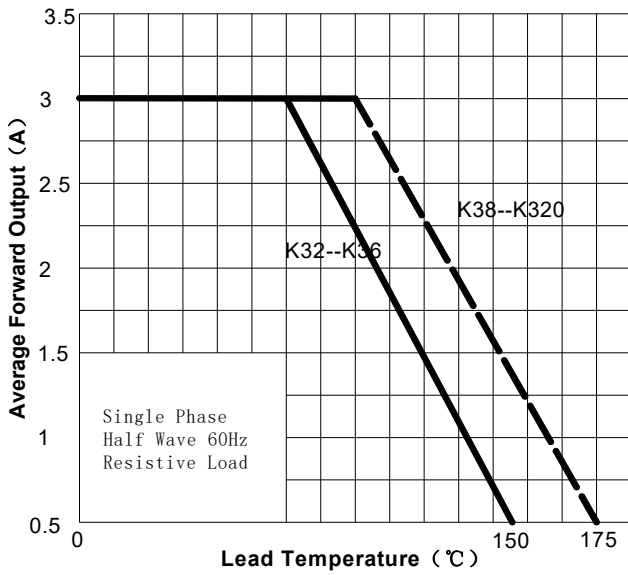


FIG2: Surge Forward Current Capability

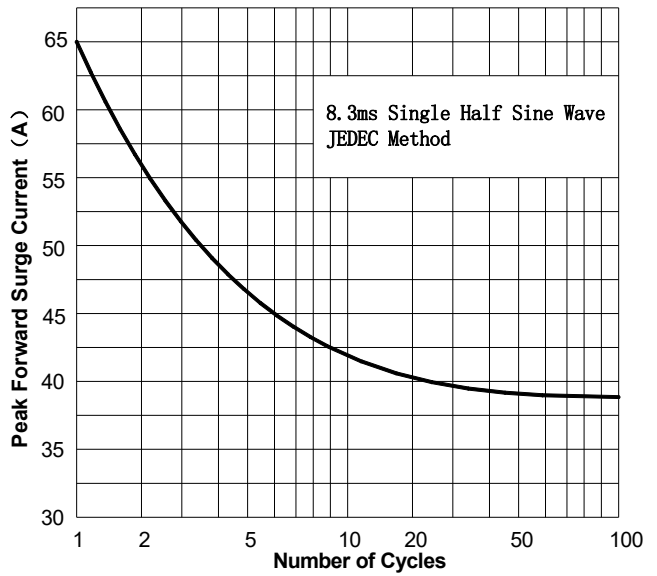


FIG3: Forward Voltage

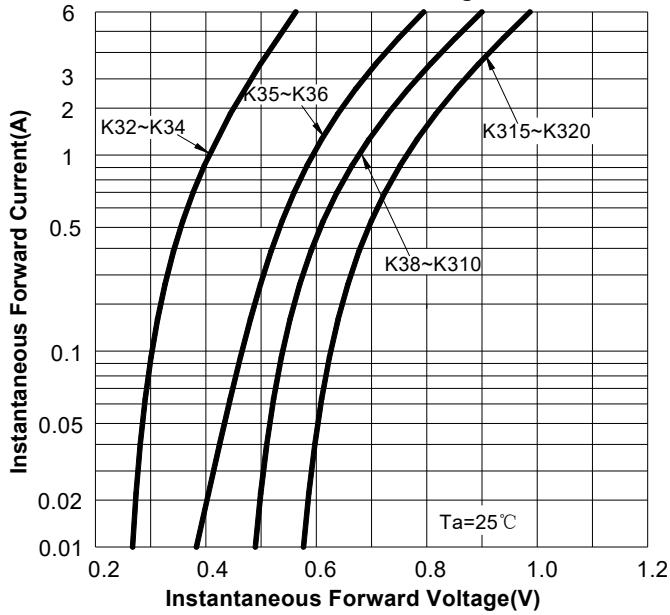
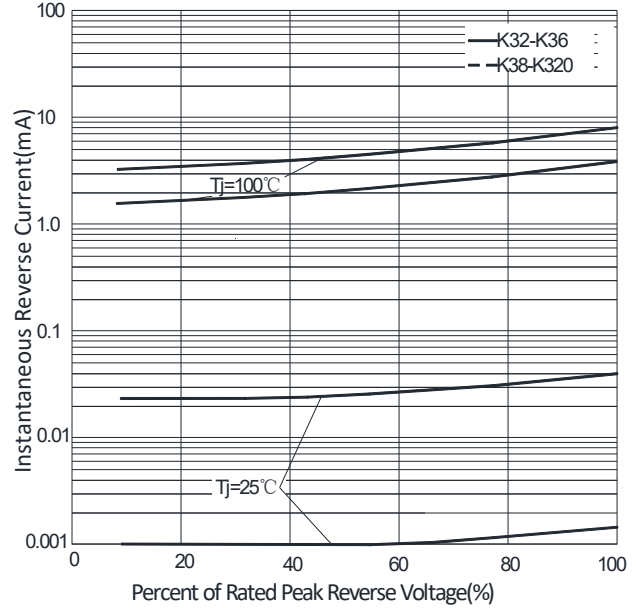


FIG4: Typical Reverse Characteristics



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

*Click to view products by [DOWO](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [D83C](#) [BAS16E6433HTMA1](#) [BAT 54-02LRH E6327](#)  
[NRVBAF360T3G](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SK310-T](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [GA01SHT18](#)  
[CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRA140TRPBF](#) [MBRB30H30CT-1G](#) [BAT 15-04R E6152](#) [JANTX1N5712-1](#) [DMJ3940-000](#)  
[SB007-03C-TB-E](#) [SK33B-TP](#) [NRVBB20100CTT4G](#) [NRVBM120LT1G](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#)  
[ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#)  
[ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [NRVBM120ET1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#)  
[B0530WSQ-7-F](#) [PDS1040Q-13](#) [B160BQ-13-F](#) [SDM05U20CSP-7](#) [B140S1F-7](#)