



# DSK12 THRU DSK120

## Surface Mount Schottky Rectifiers

**Reverse Voltage - 20 to 200 V**  
**Forward Current - 1.0 A**

### FEATURES

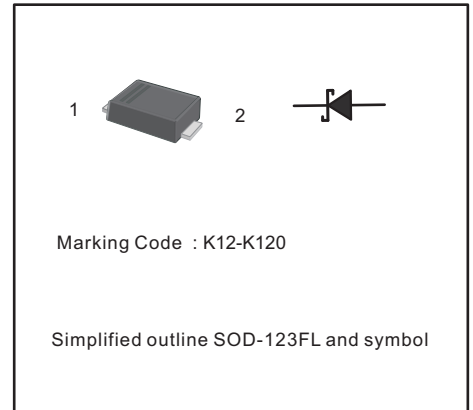
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg 0.00048oz

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	DSK12	DSK14	DSK16	DSK18	DSK110	DSK112	DSK115	DSK120	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	40				30				A
Max Instantaneous Forward Voltage at 1 A	$V_F$	0.55		0.70		0.85		0.95		V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.3 10				0.2 5		0.1 2		mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	110			80					pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	115								$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	-55 ~ +125								$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150								$^\circ\text{C}$

1) Measured at 1MHz and applied reverse voltage of 4 V D.C.

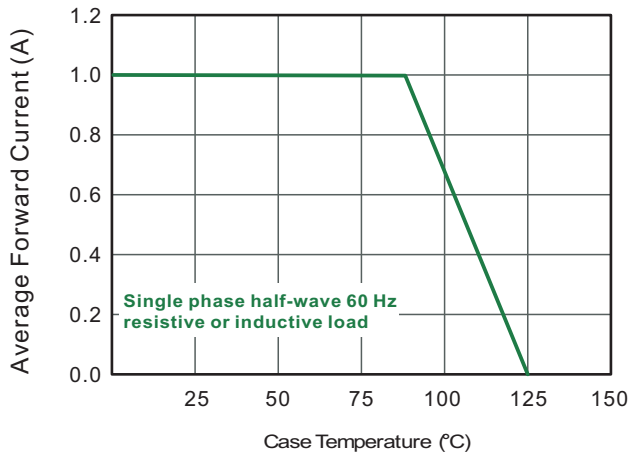
2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



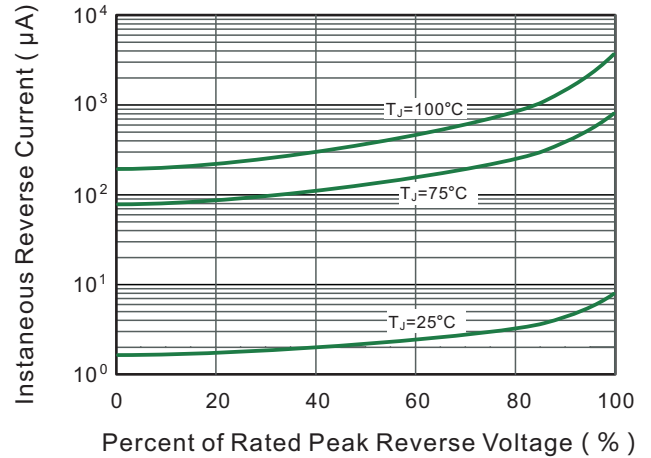
# DSK12 THRU DSK120 Surface Mount Schottky Rectifiers

**Characteristic Curves** (T = 25 °C unless otherwise noted)

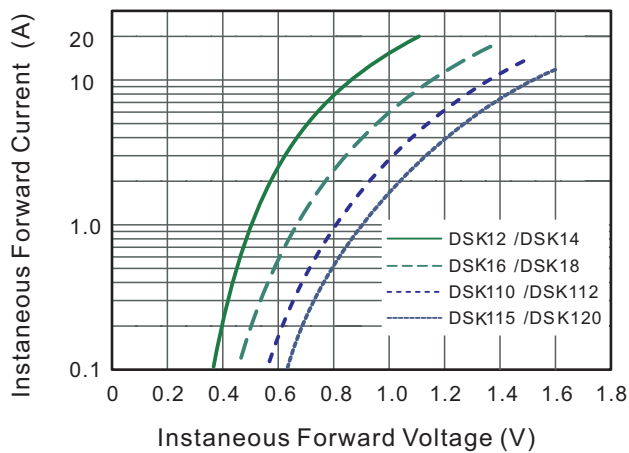
**Fig.1 Forward Current Derating Curve**



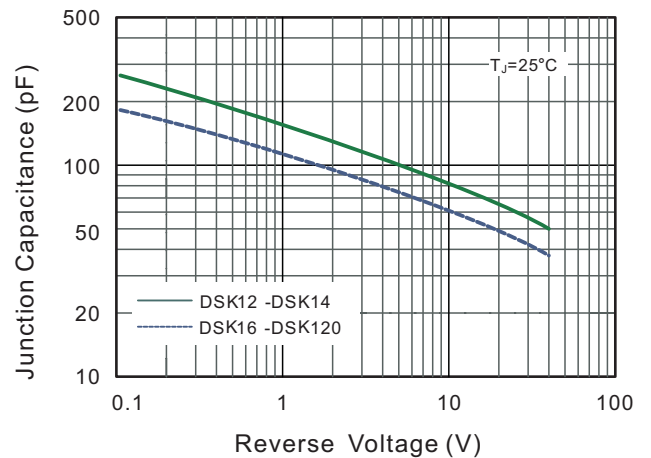
**Fig.2 Typical Reverse Characteristics**



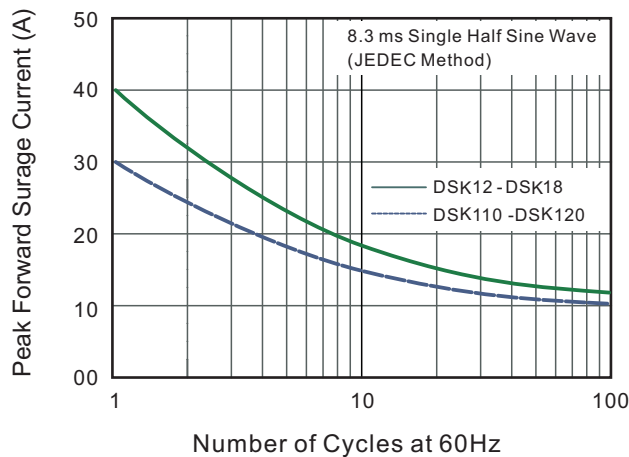
**Fig.3 Typical Forward Characteristic**



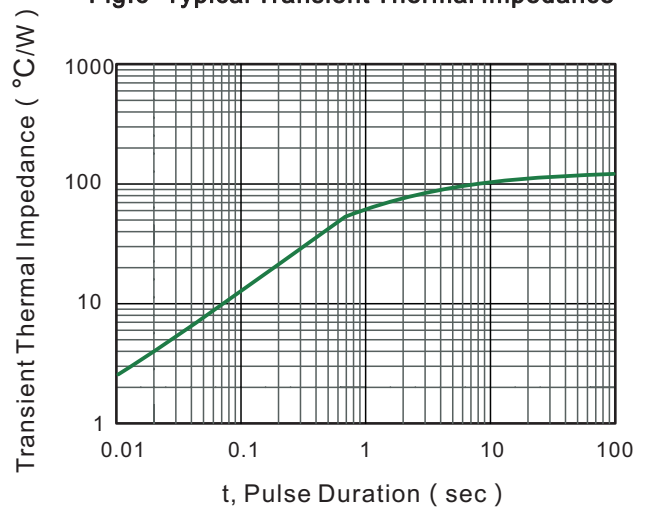
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**





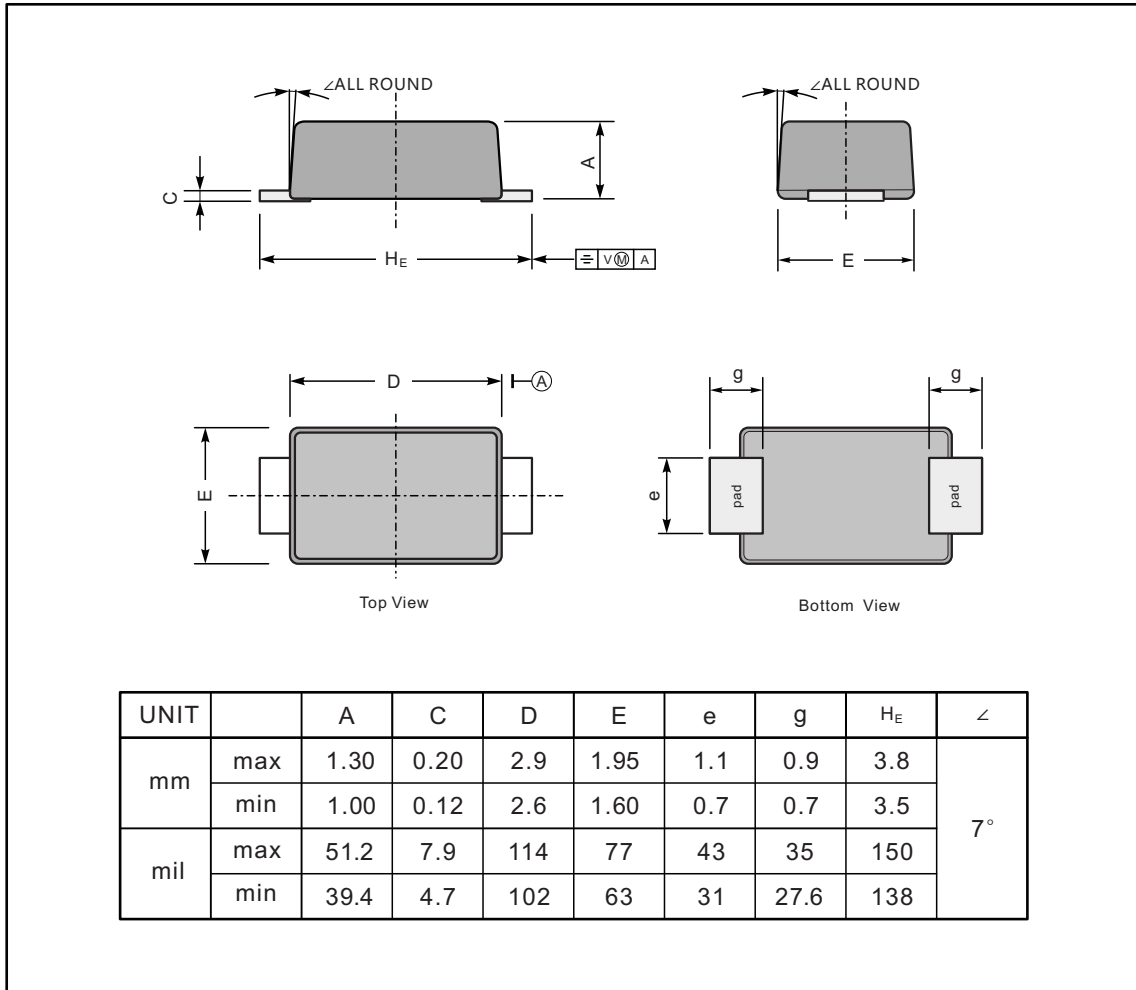
# DSK12 THRU DSK120

## Surface Mount Schottky Rectifiers

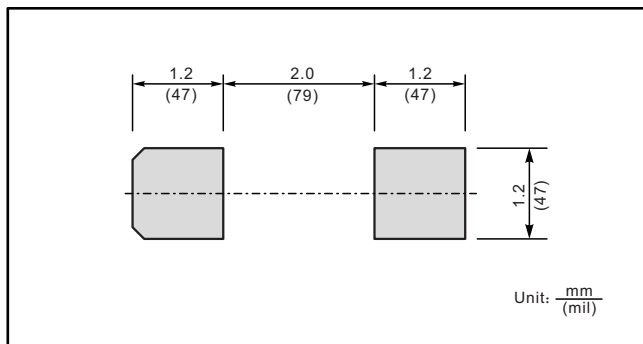
### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



### The recommended mounting pad size



### Marking

Type number	Marking code
DSK12	K12
DSK14	K14
DSK16	K16
DSK18	K18
DSK110	K110
DSK112	K112
DSK115	K115
DSK120	K120

## 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 [Juxing Electronic Technology](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR0530L-TP](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#)  
[BAS16E6433HTMA1](#) [BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [IDL02G65C5XUMA1](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#)  
[NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#)  
[CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [JANTX1N5712-1](#) [SB007-03C-TB-E](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#)  
[NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#)  
[ACDBA3100-HF](#) [CDBQC0530L-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [10BQ060-M3/5BT](#)  
[NRVB130LSFT1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#) [B0530WSQ-7-F](#)