



# DSK22 THRU DSK220

## Surface Mount Schottky Rectifiers

Reverse Voltage - 20 to 200 V

Forward Current - 2.0A

### 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



Marking Code : K22-K220

Simplified outline SOD-123FL and symbol

### 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	DSK22	DSK24	DSK26	DSK28	DSK210	DSK212	DSK215	DSK220	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	$I_{F(AV)}$	2.0							A					
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50				40				A				
Max Instantaneous Forward Voltage at 2 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 $T_a = 100^\circ\text{C}$	$I_R$	0.5 5			0.3 5			mA						
Typical Junction Capacitance <sup>1)</sup>	$C_j$	220		80				pF						
Operating Junction Temperature Range	$T_j$	-55 ~ +125							°C					
Storage Temperature Range	$T_{stg}$	-55 ~ +150							°C					

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



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**Characteristic Curves** ( $T = 25^\circ\text{C}$  unless otherwise noted)

Fig.1 Forward Current Derating Curve

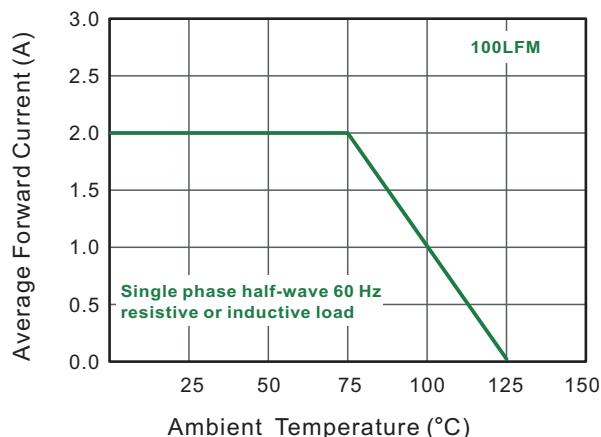


Fig.2 Typical Reverse Characteristics

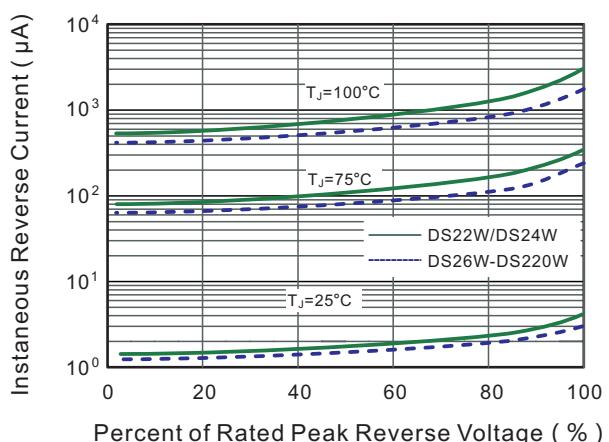


Fig.3 Typical Forward Characteristic

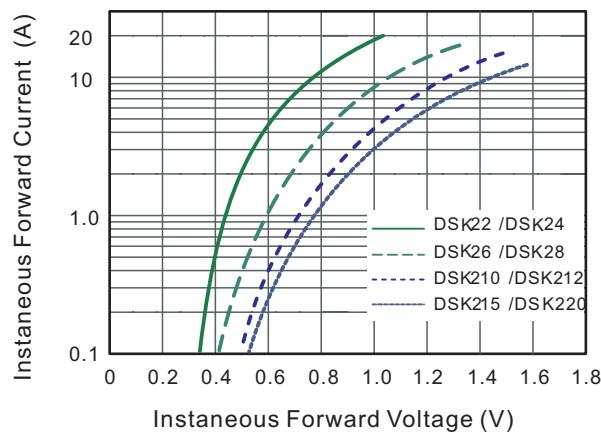


Fig.4 Typical Junction Capacitance

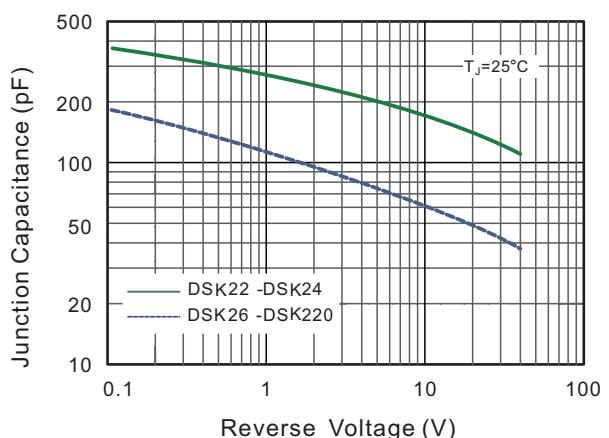
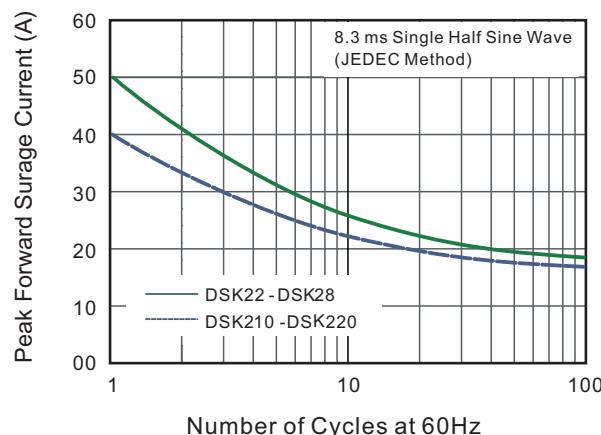


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





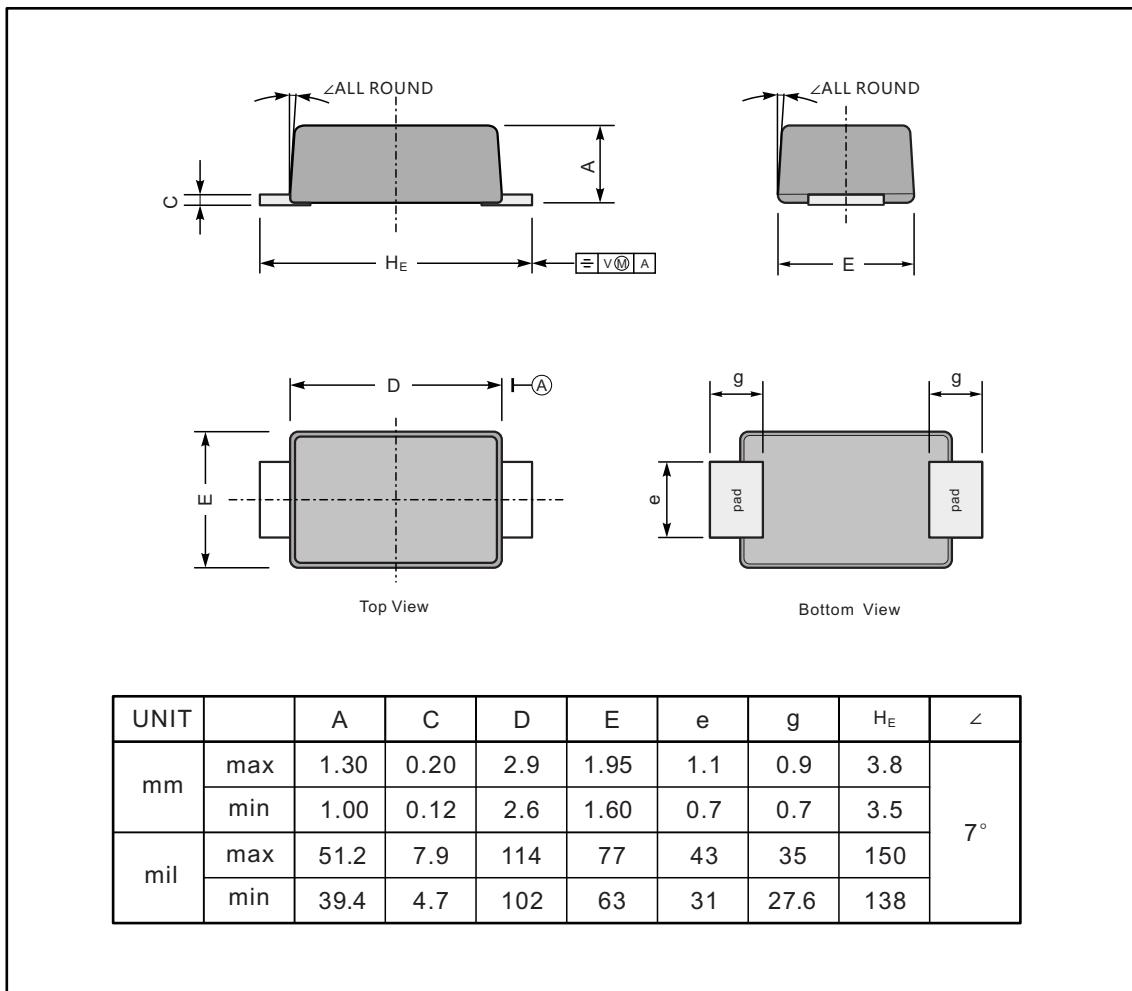
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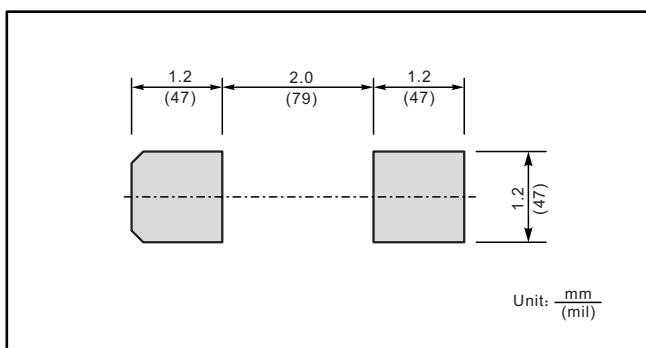
### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



### The recommended mounting pad size



### Marking

Type number	Marking code
DSK22	K22
DSK24	K24
DSK26	K26
DSK28	K28
DSK210	K210
DSK212	K212
DSK215	K215
DSK220	K220