



# DSK120

1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

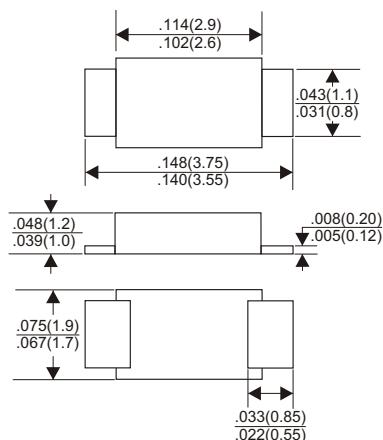
### VOLTAGE RANGE

200 Volts

### CURRENT

1.0 Ampere

#### SOD123FL



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	DSK120	UNITS
Maximum Recurrent Peak Reverse Voltage	200	V
Maximum RMS Voltage	140	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50	A
Maximum Instantaneous Forward Voltage at 1.0A	0.92	V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	0.02	mA
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	2	mA
Typical Junction Capacitance (Note1)	170	PF
Typical Thermal Resistance $R_{\theta JL}$ (Note 2)	80	$^\circ\text{C}/\text{W}$
Operating Temperature Range $T_J$	-65 — +175	$^\circ\text{C}$
Storage Temperature Range $T_{STG}$	-65 — +175	$^\circ\text{C}$

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (DSK120)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

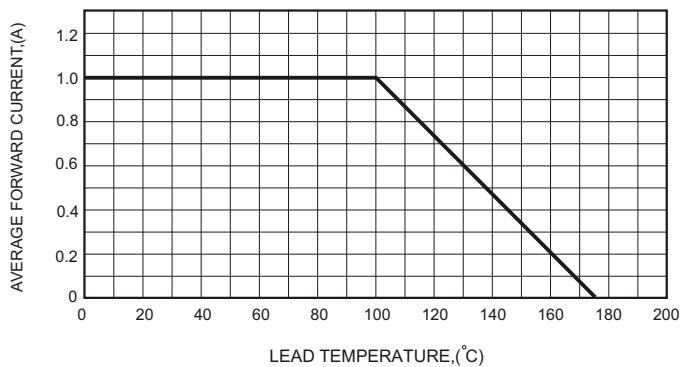


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

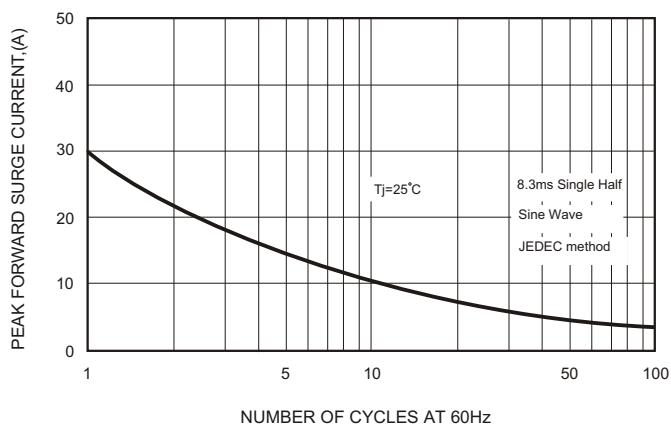


FIG.4-TYPICAL JUNCTION CAPACITANCE

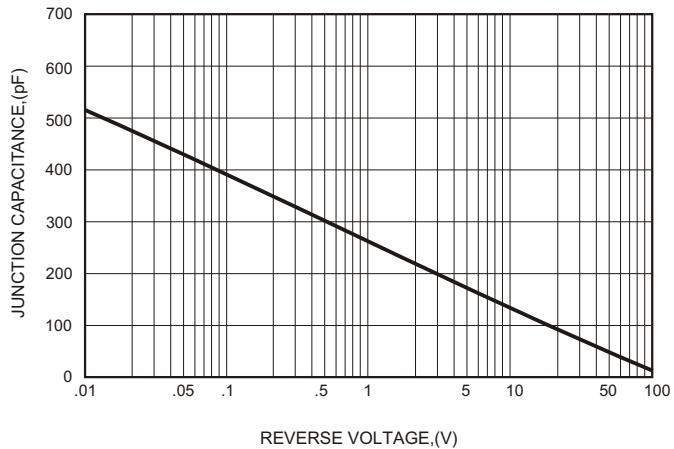


FIG.2-TYPICAL FORWARD CHARACTERISTICS

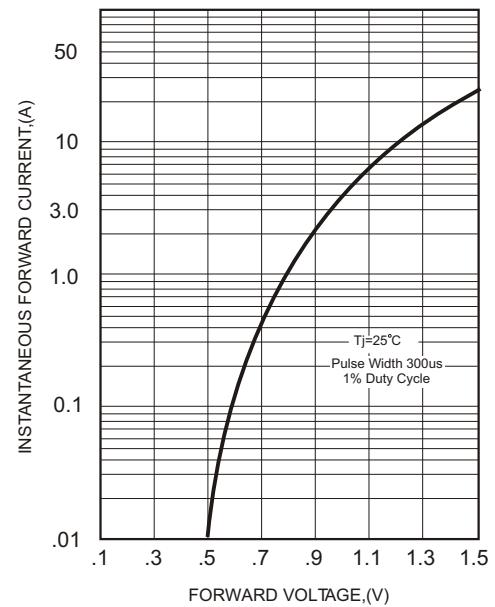


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

