



# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

## DSK12W THRU DSK110W 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

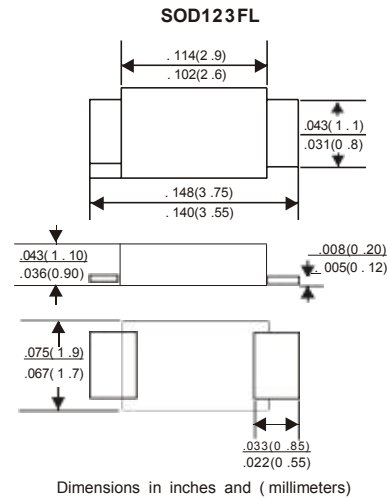
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

1.0 Ampere



### 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	DSK12W	DSK13W	DSK14W	DSK15W	DSK16W	DSK18W	DSK19W	DSK110W	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current	1.0								A
See Fig. 1									A
Peak Forward Surge Current, 8 .3 ms single half sine-wave superimposed on rated load ( JEDEC method)	30								A
Maximum Instantaneous Forward Voltage at 1 .0 A	0.55		0.70		0.85				V
Maximum DC Reverse Current Ta=25 C	0.2								mA
at Rated DC Blocking Voltage Ta=100 C	10								mA
Typical Junction Capacitance ( Note1 )	110								p F
Typical Thermal Resistance R JA ( Note 2 )	80								C/W
Operating Temperature Range Tj	-65—+ 125				-65—+ 150				* C
Storage Temperature Range Tstg	-65—+150								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 (DSK12W THRU DSK110W)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

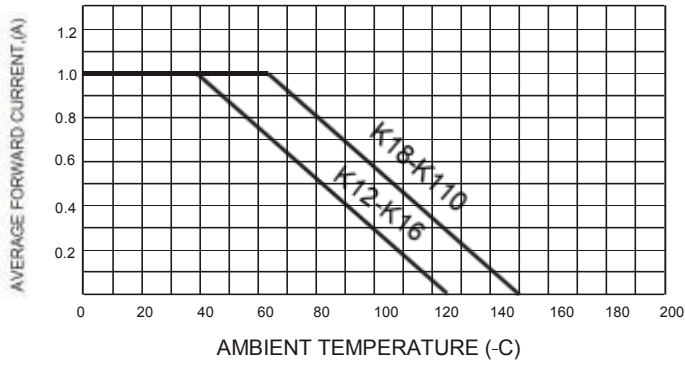


FIG.2-TYPICAL FORWARD CHARACTERISTICS

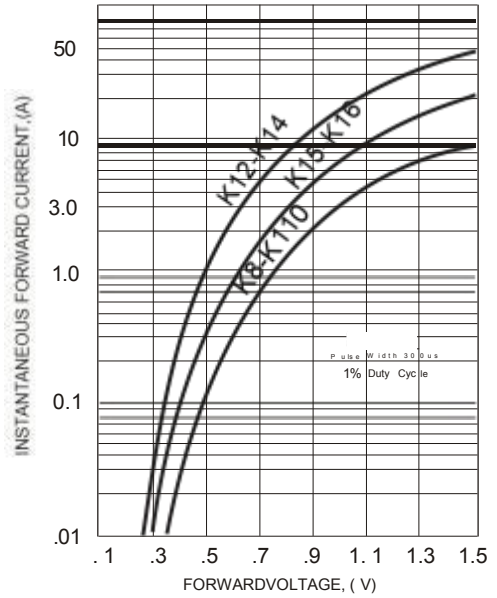


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

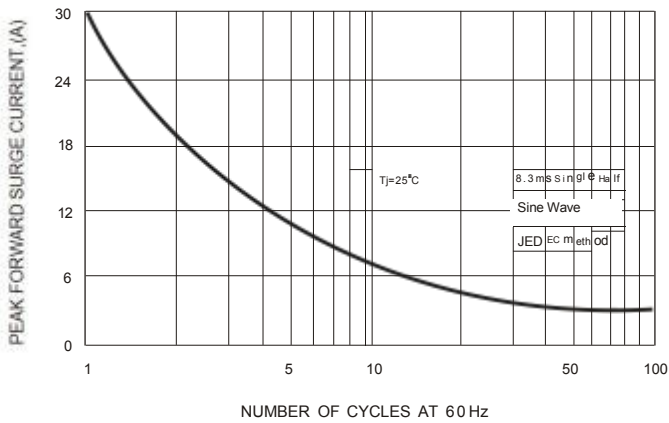


FIG.4-TYPICAL JUNCTION CAPACITANCE

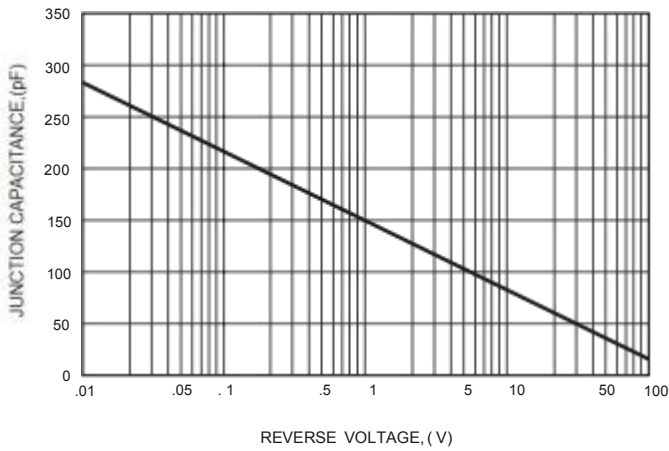


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

