



K38

3.0 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

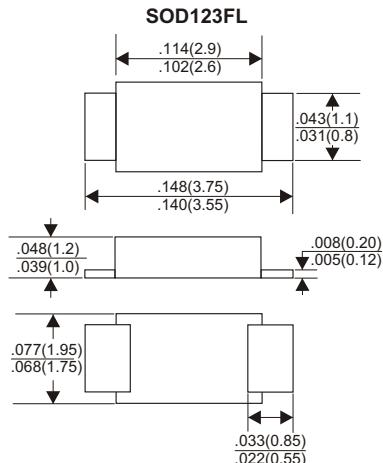
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

VOLTAGE RANGE

80 Volts

CURRENT

3.0 Ampere



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	DSK38	UNITS
Maximum Recurrent Peak Reverse Voltage	80	V
Maximum RMS Voltage	56	V
Maximum DC Blocking Voltage	80	V
Maximum Average Forward Rectified Current		
At $T_L=100^\circ\text{C}$	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80	A
Maximum Instantaneous Forward Voltage at 3.0A	0.85	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)	300	pF
Typical Thermal Resistance R_{JL} (Note 2)	10	$^\circ\text{C}/\text{W}$
Operating Temperature Range T_J	-65 — +150	$^\circ\text{C}$
Storage Temperature Range T_{STG}	-65 — +150	$^\circ\text{C}$

NOTES:

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

RATING AND CHARACTERISTIC CURVES (DSK38)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

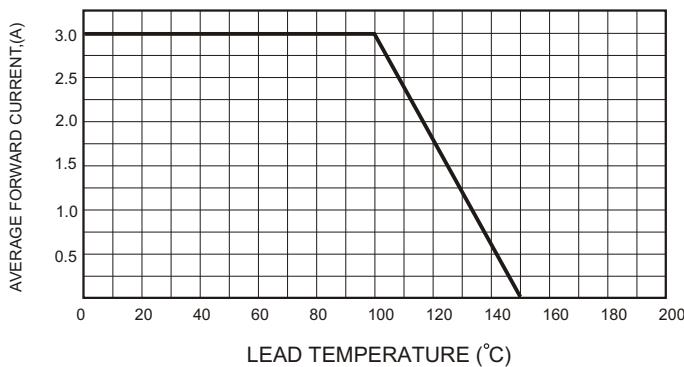


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

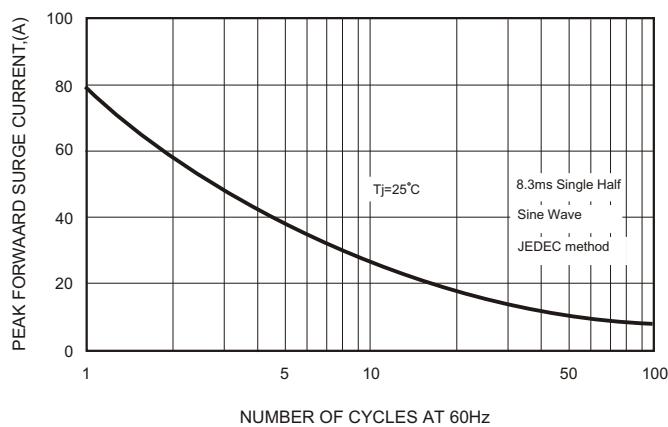


FIG.4-TYPICAL JUNCTION CAPACITANCE

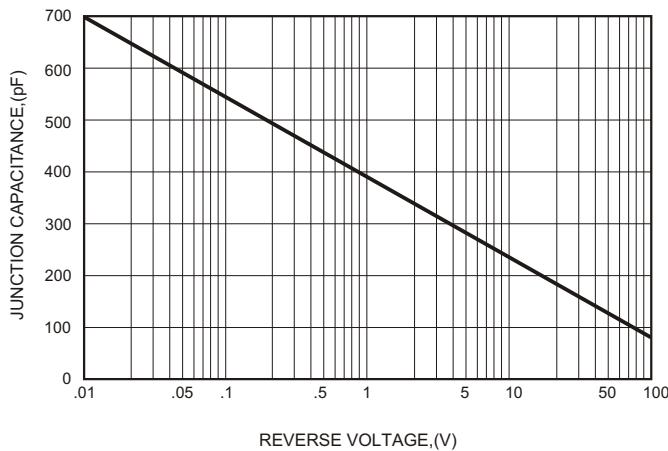


FIG.2-TYPICAL FORWARD CHARACTERISTICS

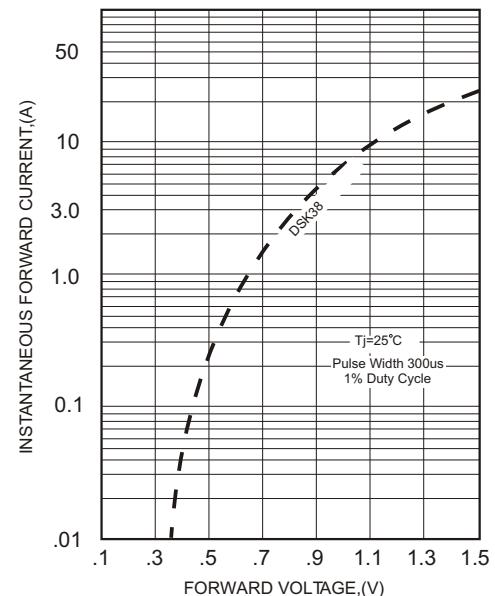


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

