





# 3.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

# **FEATURES**

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

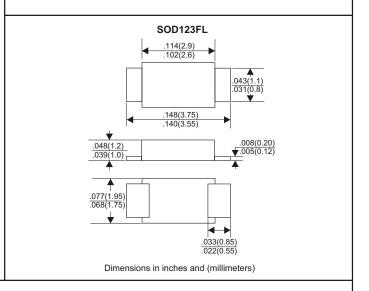
### **MECHANICAL DATA**

\* Case: Molded plastic

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

# VOLTAGE RANGE 60 Volts CURRENT

3.0 Ampere



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

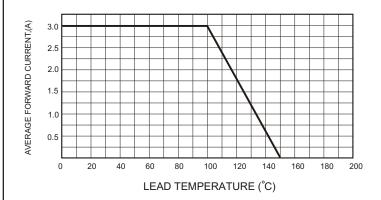
TYPE NUMBER	DS36W	UNITS
Maximum Recurrent Peak Reverse Voltage	60	V
Maximum RMS Voltage	42	V
Maximum DC Blocking Voltage	60	V
Maximum Average Forward Rectified Current		
At T <sub>L</sub> =100°C	3.0	А
Peak Forward Surge Current, 8.3 ms single half sine-wave		
superimposed on rated load (JEDEC method)	80	А
Maximum Instantaneous Forward Voltage at 3.0A	0.70	V
Maximum DC Reverse Current Ta=25°C	0.3	mA
at Rated DC Blocking Voltage Ta=100°C	5	mA
Typical Junction Capacitance (Note1)	160	pF
Typical Thermal Resistance R JL (Note 2)	80	°C/W
Operating Temperature Range T <sub>J</sub>	-65 —+125	°C
Storage Temperature Range Tsтс	-65—+150	°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 (DS36W)

#### FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

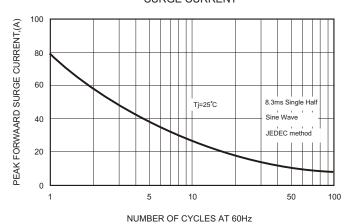
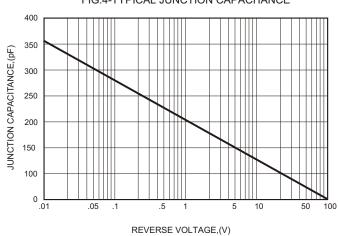


FIG.4-TYPICAL JUNCTION CAPACITANCE



#### FIG.2-TYPICAL FORWARD

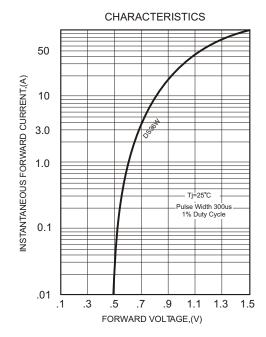


FIG.5 - TYPICAL REVERSE

