

# 1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECT

### **FEATURES**

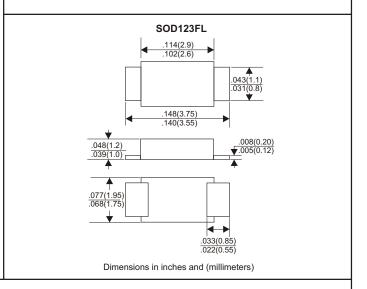
- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

#### **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

1.0 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%.

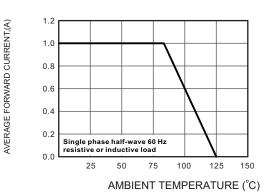
TYPE NUMBER		DS16W	UNITS
Maximum Recurrent Peak Reverse Voltage		60	V
Maximum RMS Voltage		42	V
Maximum DC Blocking Voltage		60	V
Maximum Average Forward Rectified	Current		
See Fig. 1		1.0	A
Peak Forward Surge Current, 8.3 ms	single half sine-wave		
superimposed on rated load (JEDEC method)		30	A
Maximum Instantaneous Forward Voltage at 1.0A		0.70	V
Maximum DC Reverse Current	Ta=25°C	0.3	mA
at Rated DC Blocking Voltage	Ta=100°C	10	mA
Typical Junction Capacitance (Note1)		80	pF
Typical Thermal Resistance R JA (Note 2)		100	°C/W
Operating Temperature Range T <sub>J</sub>		-65 <b>—</b> +125	°C
Storage Temperature Range Tsтс		-65 <del></del>	°C

#### NOTES

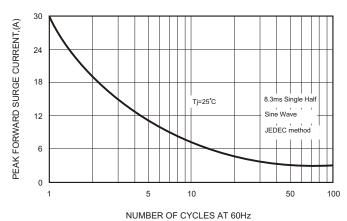
- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (DS16W)

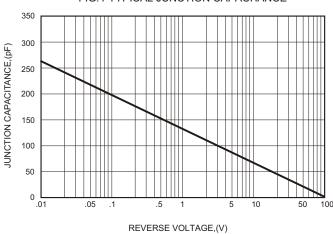
#### FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



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



#### FIG.4-TYPICAL JUNCTION CAPACITANCE



#### FIG.2-TYPICAL FORWARD

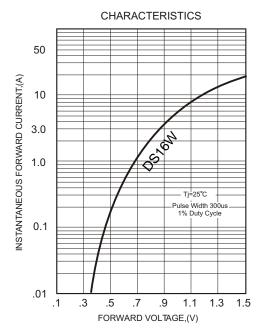


FIG.5 - TYPICAL REVERSE

