

**Standard Silicon Rectifiers**

**Reverse Voltage - 1000V**

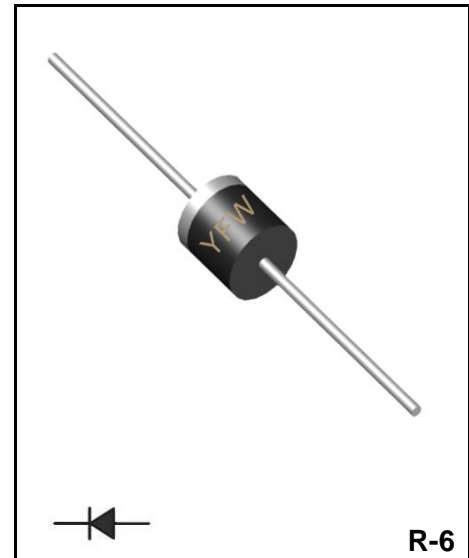
**Forward Current - 30A**

**FEATURES**

- ◆ Low cost
- ◆ Diffused junction
- ◆ Low Leakage
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ Easily cleaned with Freon. Alcohol. Isopropanol and solvents
- ◆ The plastic material carries U/L recognition 94V-O

**MECHANICAL DATA**

- ◆ Case : R-6
- ◆ Terminals: Axial leads. Solderable per MIL - STD - 202. Method 208
- ◆ Polarity: Color band denotes cathode
- ◆ Mounting Position : Any
- ◆ Weight : 0.072 ounce, 2.05 grams



**Maximum Ratings And Electrical Characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

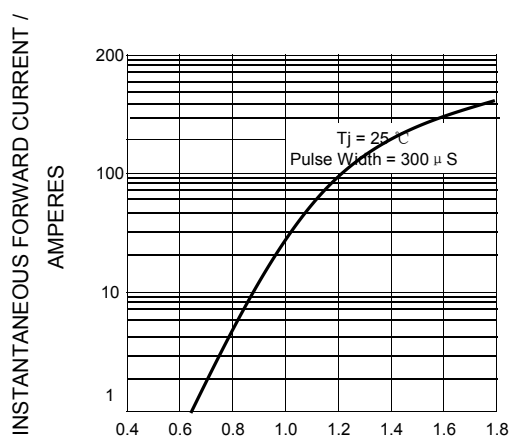
Single phase. half wave. 60HZ. resistive or inductive load. For capacitive load. derate current by 20%

Parameter	Symbols	30A10	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC blocking voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current 9.5mm Lead Length. $T_A = 75^{\circ}C$	$I_{(AV)}$	30	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated $T_j = 125^{\circ}C$	$I_{FSM}$	380	A
Maximum Forward Voltage at 30A DC	$V_F$	1.0	V
Maximum Reverse Current $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage $T_A = 100^{\circ}C$	$I_R$	5.0 200	$\mu A$
Typical Junction Capacitance ( Note 1 )	$C_j$	150	pF
Typical Thermal Resistance ( Note 2 )	$R_{qJA}$	15	$^{\circ}C/W$
Operating Junction Temperature Range	$T_J$	-55 to +155	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +155	$^{\circ}C$

**NOTE:**

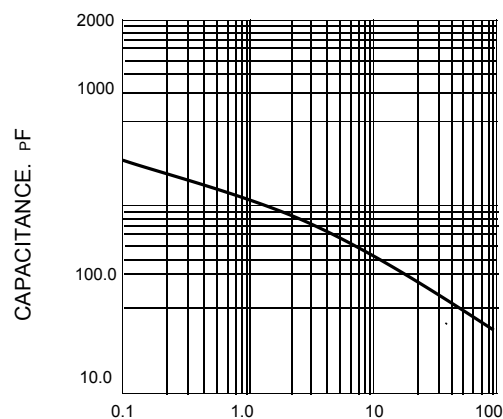
1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Ambient.

FIG.1-TYPICAL FORWARD CHARACTERISTIC



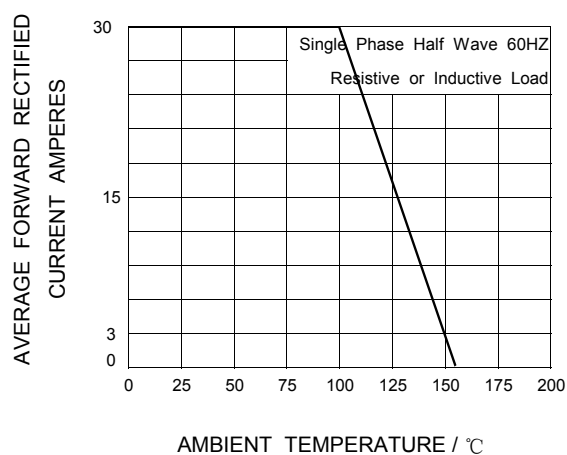
INSTANTANEOUS FORWARD VOLTAGE/VOLTS

FIG.2-TYPICAL JUNCTION CAPACITANCE



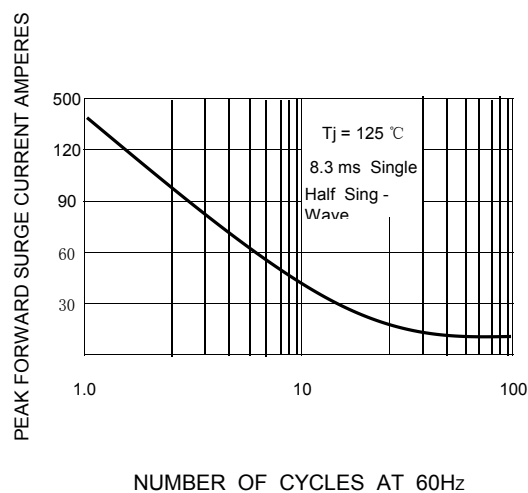
REVERSE VOLTAGE / VOLTS

FIG.3-FORWARD CURRENT DERATING CURVE



AMBIENT TEMPERATURE /  $^\circ\text{C}$

FIG.4-PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

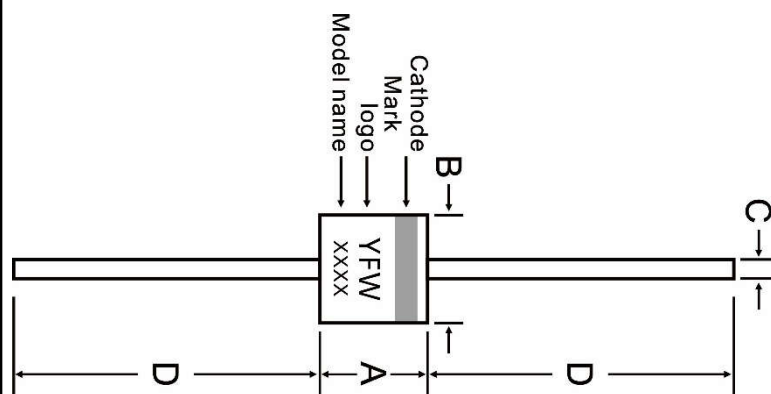
### Ordering information

Package	Packing Description	Packing Quantity
R-6	bulk	100PCS/Inner Box 5000PCS/Carton
	ammo pack	500PCS/Box 5000PCS/Carton

### Package Dimensions

#### R-6

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	8.60	9.10	0.340	0.360
B	8.60	9.10	0.340	0.360
C	1.20	1.30	0.048	0.052
D	25.40	-	1.00	-



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