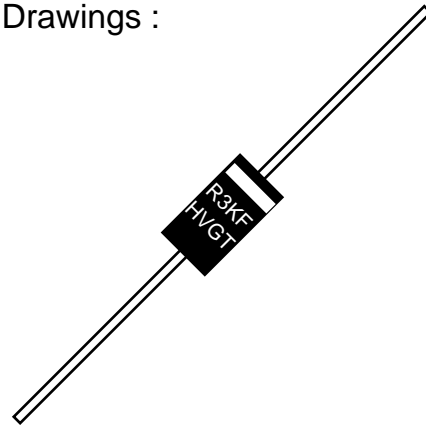




High reliability resin molded type high voltage diode in small size package which is sealed a multilayered mesa type silicon chip by epoxy resin.

### Outline Drawings :

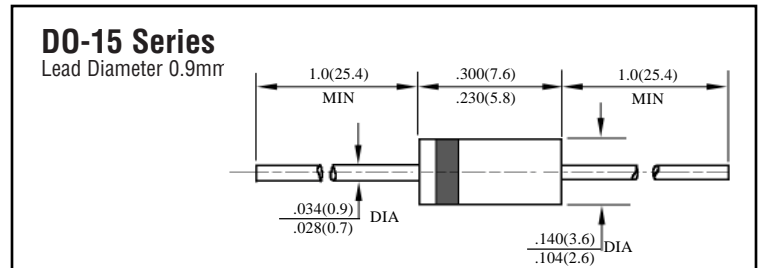


### Features

- \*Fast switching
- \*Low leakage
- \*High reliability
- \*High current capability
- \*High surge capability

### Applications

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.4 gram



### Maximum Ratings and Characteristics

#### Absolute Maximum Ratings

Items	Symbols	Condition	R3000F	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_a=25^{\circ}\text{C}$ ,	3.0	kV
Average Output Current	$I_o$	$T_a=25^{\circ}\text{C}$ , Resistive Load	200	mA
Surge Current	$I_{FSM}$	$T_a=25^{\circ}\text{C}$ , 8.3 ms	30	A peak
Junction Temperature	$T_j$		125	$^{\circ}\text{C}$
Allowable Operation Case Temperature	$T_c$		125	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$		-65 to +175	$^{\circ}\text{C}$

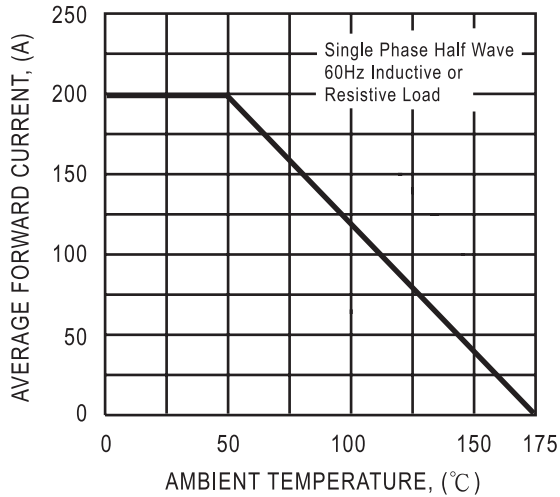
#### Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Items	Symbols	Conditions	R3000F	Units
Maximum Forward Voltage Drop	$V_F$	at $25^{\circ}\text{C}$ , $I_F = I_{F(AV)}$	4.0	V
Maximum Reverse Current	IR1	at $25^{\circ}\text{C}$ , $V_R = V_{RRM}$	5.0	$\mu\text{A}$
	IR2	at $100^{\circ}\text{C}$ , $V_R = V_{RRM}$	100	$\mu\text{A}$
Maximum Reverse Recovery Time	$T_{rr}$	at $25^{\circ}\text{C}$ ; $I_F = 0.5\text{A}$ ; $I_R = 1.0\text{A}$ ; $I_{rr} = 0.25\text{A}$ ;	500	nS
Junction Capacitance	$C_j$	at $25^{\circ}\text{C}$ ; $V_R = 0\text{V}$ , $f = 1\text{MHz}$	6.0	pF

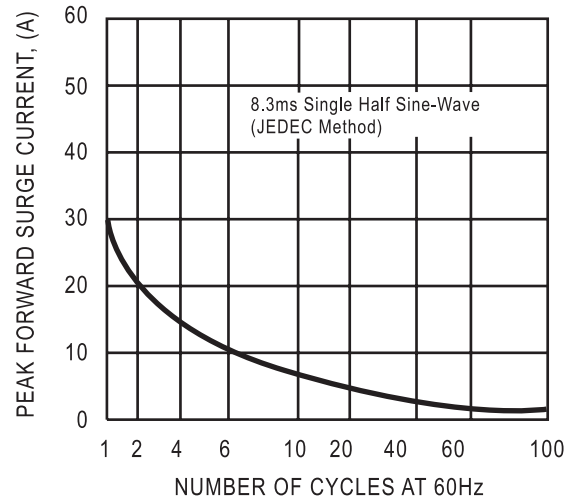


■ **RA TING AND CHARACTERISTIC CURVES:**

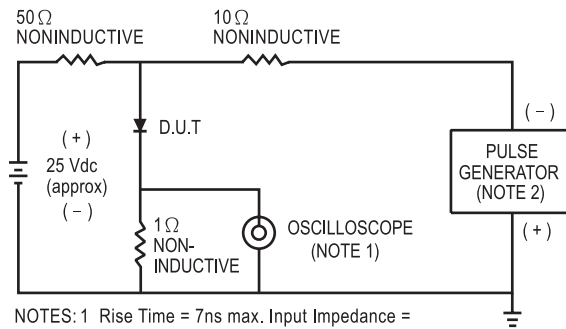
**FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.  
2. Rise Time = 10ns max. Source Impedance = 50 ohms.

