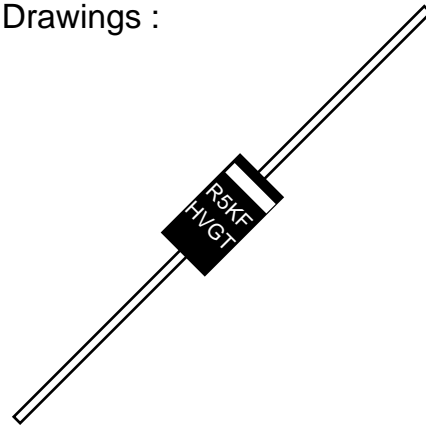


High reliability resin molded type high voltage diode in small size package which is sealed a multilayered mesa type silicon chip by epoxy resin.

Outline Drawings :



Features

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

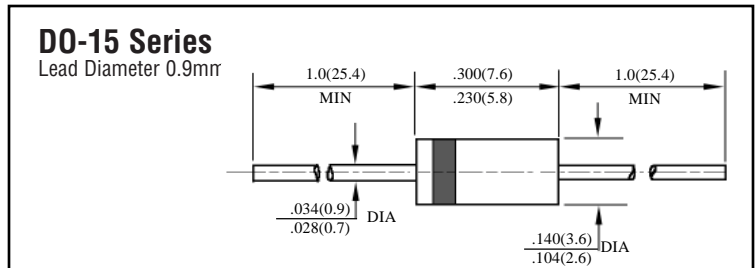
Applications

- * 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	R5000F	Units
Repetitive Peak Reverse Voltage	V_{RRM}	$T_a=25^{\circ}\text{C}$,	5.0	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	R5000F	Units
Maximum Forward Voltage Drop	V_F	at 25°C , $I_F = I_{F(AV)}$	5.0	V
Maximum Reverse Current	IR1	at 25°C , $V_R = V_{RRM}$	5.0	μA
	IR2	at 100°C , $V_R = V_{RRM}$	100	μA
Maximum Reverse Recovery Time	T_{rr}	at 25°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°C ; $V_R = 0\text{V}$, $f = 1\text{MHz}$	7.0	pF



■ **RA TING AND CHARACTERISTIC CURVES:**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

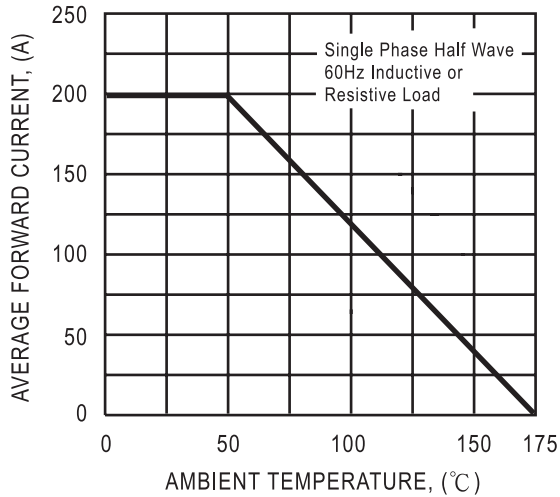


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

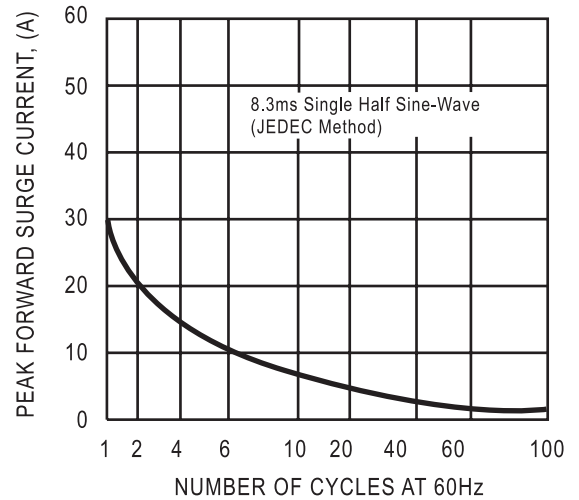
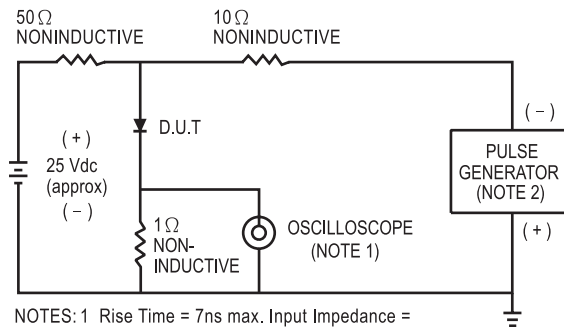


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

