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

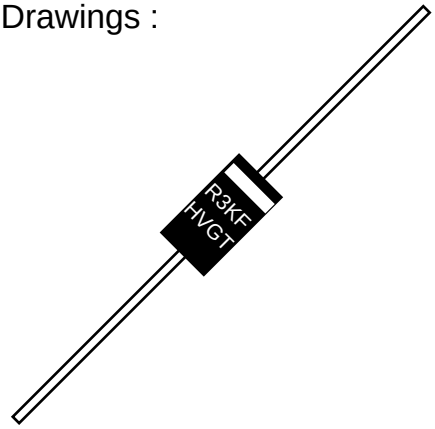
Features

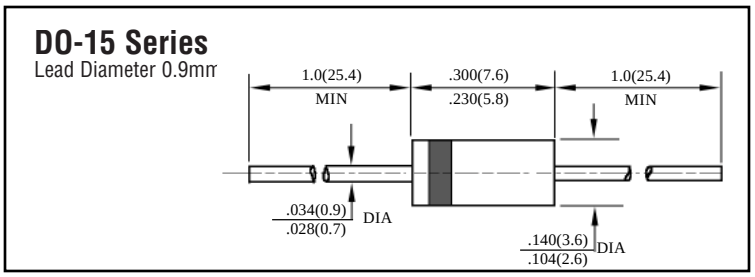
*Fast switching
*Low leakage
*High reliability
*High current capability
*High surge capability

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

Outline Drawings :





Maximum Ratings and Characteristics

● Absolute Maximum Ratings

Items	Symbols	Condition	R3000F	Units
Repetitive Peak Renerse Voltage	V_{RRM}	Ta=25°C,	3.0	kV
Average Output Current	I_O	Ta=25°C,Resistive Load	200	mA
Suege Current	I_{FSM}	Ta=25°C,8.3 ms	30	A peak
Junction Temperature	T_j		125	°C
Allowable Operation Case Temperature	Tc		125	°C
Storage Temperature	T_{stg}		-65 to +175	°C

● Electrical Characteristics (Ta=25°C Unless otherwise specified)

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

RATING AND CHARACTERISTIC CURVES:

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

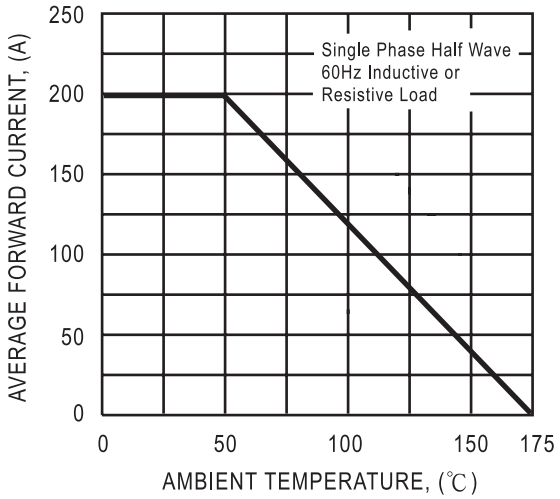


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

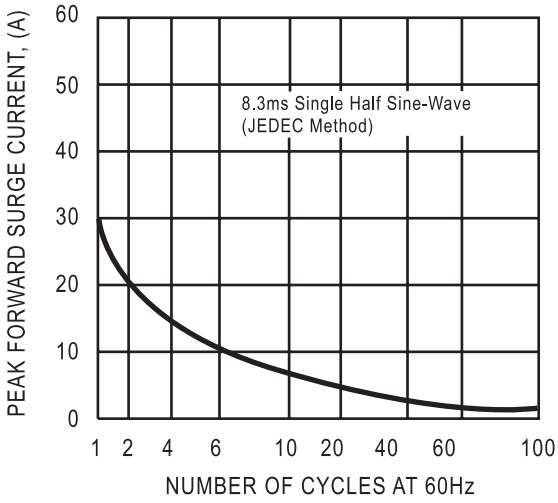
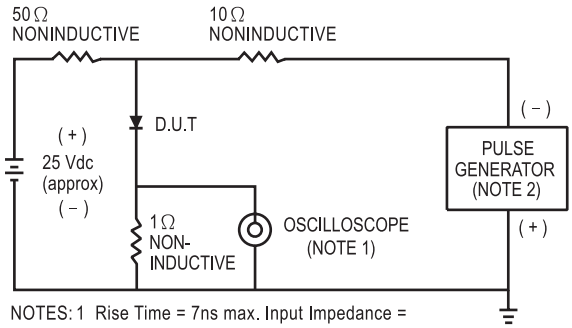


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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