

Dimensions in inches and (millimeters)

FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage
- Pb-Free package is available
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1
- Polarity: Color band denotes cathode end

MARKING: L9

Plastic-Encapsulate Diodes

Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)			
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	21	A
Forward Continuous Current (Note 1)	I_F	200	mA
Average Rectified Output Current	I_O	100	mA
Forward Surge Current (Note 1)	I_{FSM}	600	mA
Repetitive Peak Forward Current (Note 1)	I_{FRM}	300	mA
Power Dissipation (Note 1)	P_D	200	mW
Thermal Resistance From Junction To Ambient (Note 1)	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction temperature	T_J	125	$^\circ\text{C}$
Operating/ Storage temperature	T_{STG}	-55~+125	$^\circ\text{C}$

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise noted)						
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_{RS}=100\mu\text{A}$	30	—	—	V
Forward Voltage (Note 2)	V_{F1}	$I_F=0.1\text{mA}$	—	—	240	mV
	V_{F2}	$I_F=1\text{mA}$	—	—	320	
	V_{F3}	$I_F=10\text{mA}$	—	—	400	
	V_{F4}	$I_F=30\text{mA}$	—	—	500	
	V_{F5}	$I_F=100\text{mA}$	—	—	1000	
Reverse Leakage Current (Note 2)	I_{RM}	$V_R=25\text{V}$	—	—	2	μA
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mAdc}$ $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$	—	—	5	ns
Capacitance Between Terminals	C_T	$V_R=1\text{V}$, $f=1\text{MHz}$	—	—	10	pF

Notes: 1. Valid provided that leads are kept at ambient temperature

2. $t < 300\mu\text{s}$, duty cycle $< 2\%$.

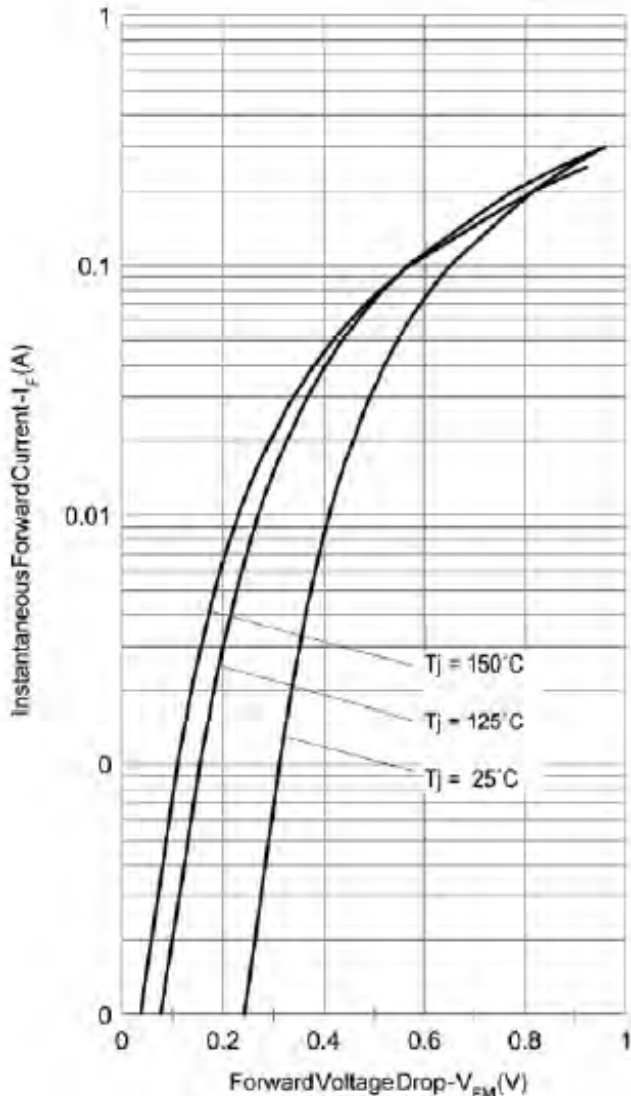


Fig. 1 - Max. Forward Voltage Drop Characteristics (Per Leg)

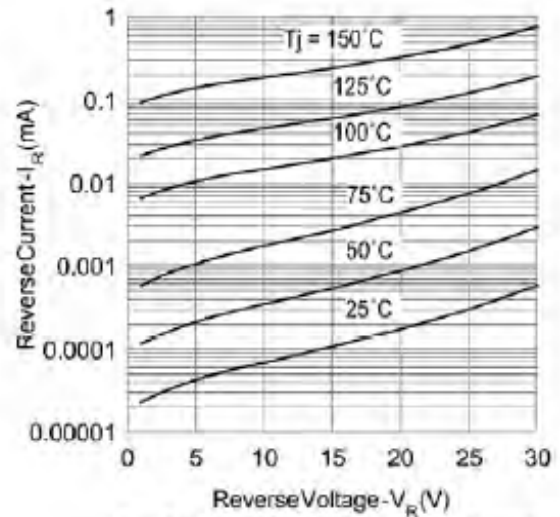


Fig. 2 - Typical Values Of Reverse Current Vs. Reverse Voltage (Per Leg)

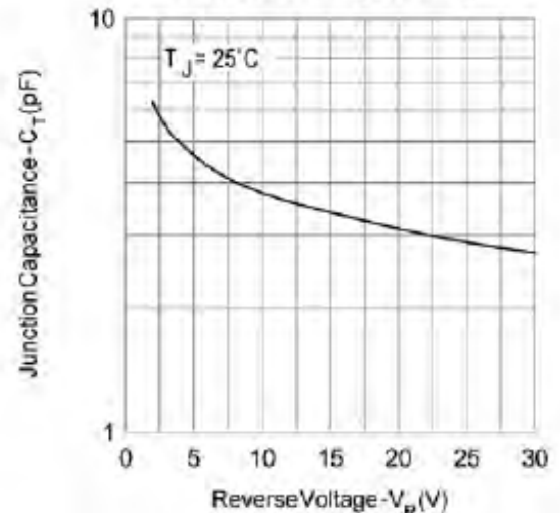


Fig. 3 - Typical Junction Capacitance Vs. Reverse Voltage (Per Leg)

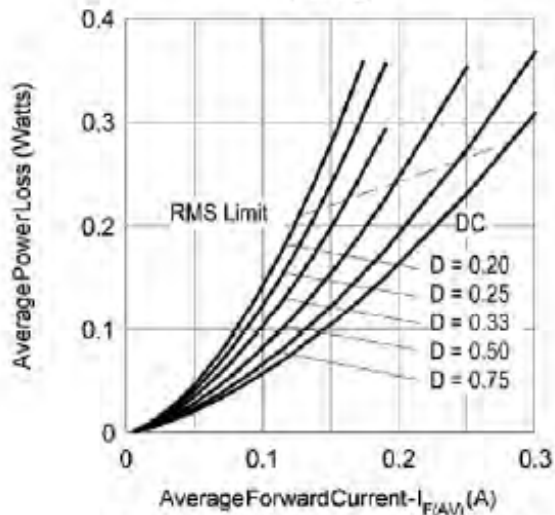


Fig. 4 - Forward Power Loss Characteristics

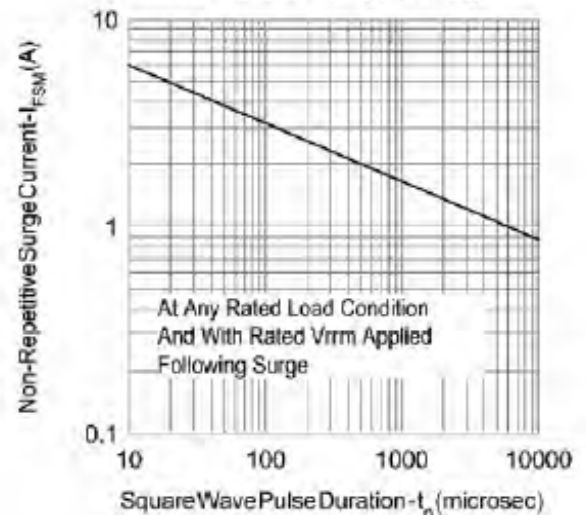


Fig. 5 - Max. Non-Repetitive Surge Current