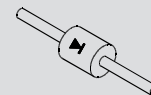


# Spice Model

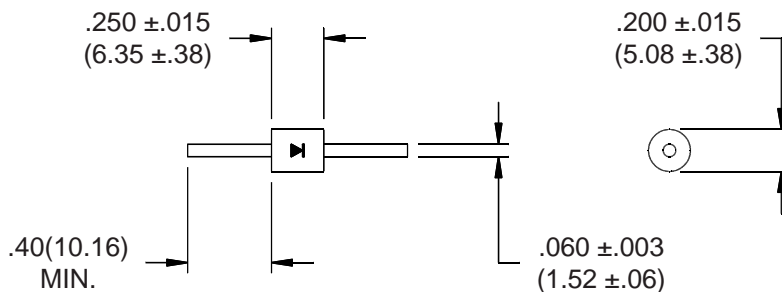


**Z100S**



## Electrical Characteristics and Maximum Ratings

Part Number	Working Reverse Voltage (Vrwm)	Average Rectified Current (Io)		Reverse Current @ Vrwm (Ir)		Forward Voltage (Vf)		1 Cycle Surge Current tp=8.3ms (Ifsm)	Repetitive Surge Current (Ifrm)	Reverse Recovery Time (3) (Trr)	Thermal Impedance $\theta_{J-L}$		Junction Cap. @ 50VDC @ 1kHz (Cj)
		55°C(1)	100°C(2)	25°C	100°C	25°C		25°C	25°C	25°C	L=.000	L=.250	25°C
	Volts	Amps	Amps	$\mu$ A	$\mu$ A	Volts	Amps	Amps	Amps	ns	°C/W	°C/W	pF
Z100S	10000	0.60	0.30	1.0	25	12.0	0.6	25	5	3000	3	10.0	8



Name	Parameter	Value	Units
I <sub>s</sub>	Reverse leakage current	5.0E-07	Amps
N	Emission coefficient	25	
T	Temperature	25	C
RS	Diode series resistance	0.045	Ohm
TT	Transit time	3000	nS
C <sub>J0</sub>	Zero-bias junction capacitance	9.85	pF
VJ	Bulk junction potential	8.31	Volts
M	Grading coefficient	0.5	
EG	Energy-band gap	1.11	Volts
XTI	Temperature coefficient	3	
KF	Flicker-noise coefficient	0	
AF	Flicker-noise exponent	1	
FC	Coefficient for capacitance	0.5	
BV	Diode breakdown voltage	12000	Volts
IBV	Diode breakdown current	100	uAmps

Dimensions: In. (mm) \* All temperatures are ambient unless otherwise noted. \* Data subject to change without notice.



**Voltage Multipliers, Inc.**  
8711 W. Roosevelt Ave.  
Visalia, CA 93291

Tel (559) 651-1402  
Fax (559) 651-0740  
www.voltagemultipliers.com