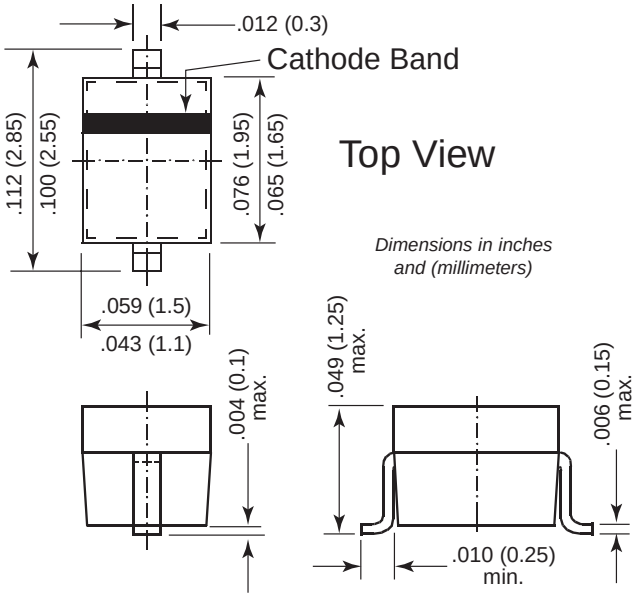
GENERAL SEMICONDUCTOR®

GTZ Series
for ESD Protection
Zener Diodes

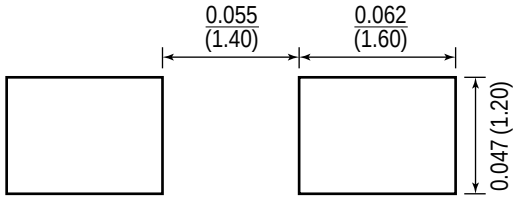
VZ Range 5.1 to 10V
Power Dissipation 200mW

New Product

SOD-323



Mounting Pad Layout



Mechanical Data

Case: SOD-323 Plastic Package
Weight: Approx. 0.004g
Marking Codes: See table on next page
Packaging Codes/Options:
D5/10K per 13” reel (8mm tape)
D6/3K per 7” reel (8mm tape)

Features

- Silicon Planar Power Zener Diodes
- Low Zener impedence and low leakage current
- Popular in Asian designs
- Compact surface mount device
- Ideal for automated mounting
- Complies with IEC 61000-4-2 for ESD protection

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Power Dissipation	Pd	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	–55 to + 150	°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Type	Marking Code	Zener Voltage V_Z (V)[1]		I_{ZT} (mA)	Reverse Current		Dynamic Resistance		ESD-Capability[2] (kV) (min)
		min	max		$I_{R(max)}$ (μA)	V_{RT} (V)	$r_{d(max)}$ (Ω)	I_{ZT} (mA)	
GTZ5.1	G1	4.84	5.37	5	5	1.5	130	5	30
GTZ5.6	G2	5.31	5.92	5	5	2.5	80	5	30
GTZ6.2	G3	5.86	6.53	5	2	3.0	50	5	30
GTZ6.8	G4	6.47	7.14	5	2	3.5	30	5	30
GTZ7.5	G5	7.06	7.84	5	2	4.0	30	5	30
GTZ8.2	G6	7.76	8.64	5	2	5.0	30	5	30
GTZ9.1	G7	8.56	9.55	5	2	6.0	30	5	30
GTZ10	G8	9.45	10.55	5	2	7.0	30	5	30

Notes:
(1) Tested with pulse (PW = 40ms).
(2) C = 150pF, R = 330 ohms, Both forward and reverse direction 10 pulse (contact mode)

Ratings and Characteristic Curves* (T_A = 25°C unless otherwise noted)

Fig. 1 – V_Z vs I_Z (GTZ6V8)

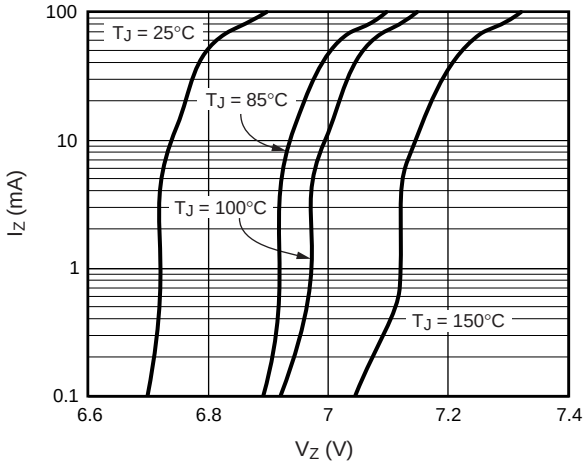


Fig. 2 – V_Z vs I_Z (GTZ9V1)

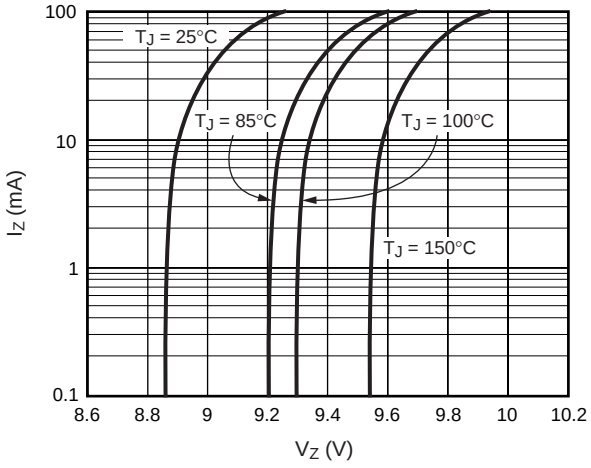


Fig. 3 – R_Z vs I_Z (GTZ6V8)

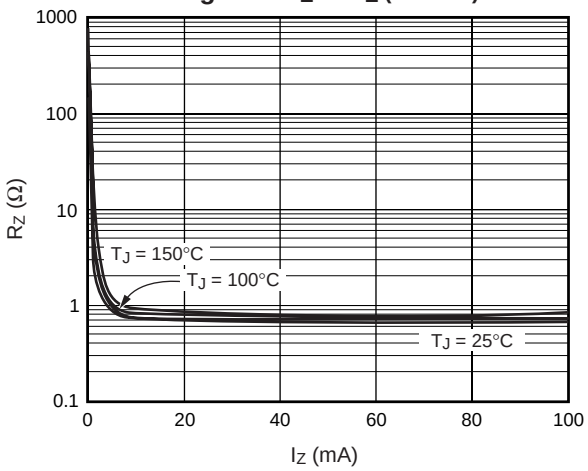


Fig. 4 – R_Z vs I_Z (GTZ9V1)

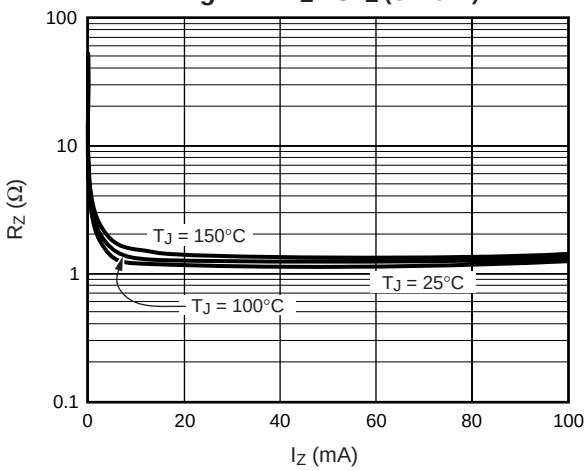


Fig. 5 – V_F vs I_F (GTZ6V8)

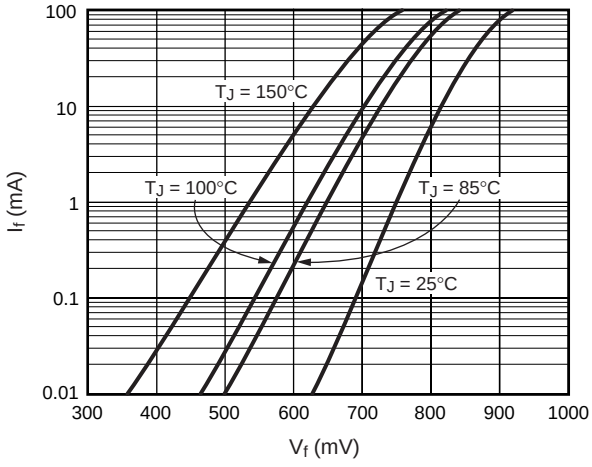
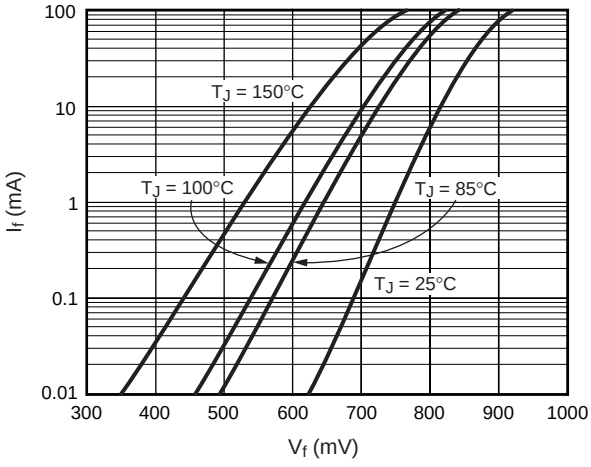


Fig. 6 – V_F vs I_F (GTZ9V1)



**Curves for other voltages available upon request*