TAYCHIPST

Glass Passivated Zener Diode

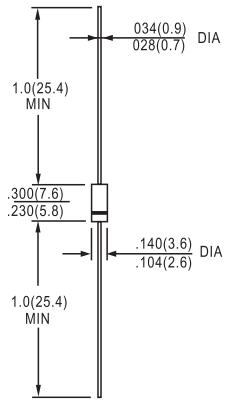
ZY6V2GP THRU ZY200GP

5.8V-188V 2W

FEATURES

- Glass passivated junction
- The plastic material carries U/L recognition 94 V-0
- Terminals: Axial Leads
- Polarity: Color band denotes cathode

DO-15



Dimensions in inches and (millimeters)

Mechanical Data

.Min. distance from body to soldering point, 4 mm.
Max. solder temperature, 350 °C.
Max. soldering time, 3.5 sec.
Do not bend lead at a point closer than 2 mm. to the body.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings, according to IEC publication No. 134

P_{tot}	Power dissipation at Tamb = 25 °C	2 W
P_{ZSM}	Non repetitive peak zener dissipation (t = 10 ms)	60 W
T_j	Operating temperature range	– 65 to + 175 °C
T_{stg}	Storage temperature range	– 65 to + 175 °C

Electrical Characteristics at Tamb = 25 °C

R_{thj-a}	Max. thermal resistance at: 10 mm. lead length	60 °C/W

Type	Zener (1) Voltage Range V_Z at I_{ZT}	Maximum Zener Impedance Z_{ZT} at I_{ZT}	Test Current I_{ZT}	Temp coef. of Zener Volt.	Min Reverse Voltage at I_R = 1 μA V_R	Max Regulator Current at 45 °C I_{ZM}
	(V)	(Ω)	(mA)	(% / °C)	(V)	(mA)
ZY6V2GP	5.8-6.6	2	100	+0.025	1.5	245
ZY6V8GP	6.4-7.2	2	100	+0.035	2	220
ZY7V5GP	7.0-7.9	2	100	+0.035	2	200
ZY8V2GP	7.7-8.7	2	100	+0.055	3.5	180
ZY9V1GP	8.5-9.6	4	50	+0.055	6.9	165
ZY10GP	9.4-10.6	4	50	+0.070	7.5	145
ZY11GP	10.4-11.6	7	50	+0.075	8.3	135
ZY12GP	11.4-12.7	7	50	+0.075	9.1	120
ZY13GP	12.4-14.1	10	50	+0.075	9.9	110
ZY15GP	13.8-15.8	10	50	+0.075	11.4	98
ZY16GP	15.3-17.1	15	25	+0.085	12.2	90
ZY18GP	16.8-19.1	15	25	+0.085	13.7	80
ZY20GP	18.8-21.2	15	25	+0.085	15.2	72
ZY22GP	20.8-23.3	15	25	+0.085	16.7	66
ZY24GP	22.8-25.6	15	25	+0.085	18.2	60
ZY27GP	25.1-28.9	15	25	+0.085	20.5	53
ZY30GP	28-32	15	25	+0.085	22.8	48
ZY33GP	31-35	15	25	+0.085	25	44
ZY36GP	34-38	40	10	+0.085	27.4	40
ZY39GP	37-41	40	10	+0.085	29.6	37
ZY43GP	40-46	45	10	+0.095	32.7	33
ZY47GP	44-50	45	10	+0.095	35.7	30
ZY51GP	48-54	60	10	+0.095	38.8	27
ZY56GP	52-60	60	10	+0.095	42.5	25
ZY62GP	58-66	80	10	+0.105	47.1	21
ZY68GP	64-72	80	10	+0.105	51.7	20
ZY75GP	70-79	100	10	+0.105	57	18
ZY82GP	77-88	100	10	+0.105	62.4	16
ZY91GP	85-96	200	5	+0.110	69.2	15
ZY100GP	94-106	200	5	+0.110	76	13
ZY110GP	104-116	250	5	+0.110	83.5	12
ZY120GP	114-127	250	5	+0.110	91.2	11
ZY130GP	124-141	300	5	+0.110	98.2	10
ZY150GP	138-156	300	5	+0.110	114	9
ZY160GP	153-171	350	5	+0.110	122	8.5
ZY180GP	168-191	350	5	+0.110	137	8.0
ZY200GP	188-212	350	5	+0.110	152	7.5

(1) Tested with pulses.
Pulse test: tp ≤ 50 ms; δ < 2%