

## 2Z12 - 2Z51

**V<sub>Z</sub> : 12 - 51 Volts**

**P<sub>D</sub> : 1.5 Watts**

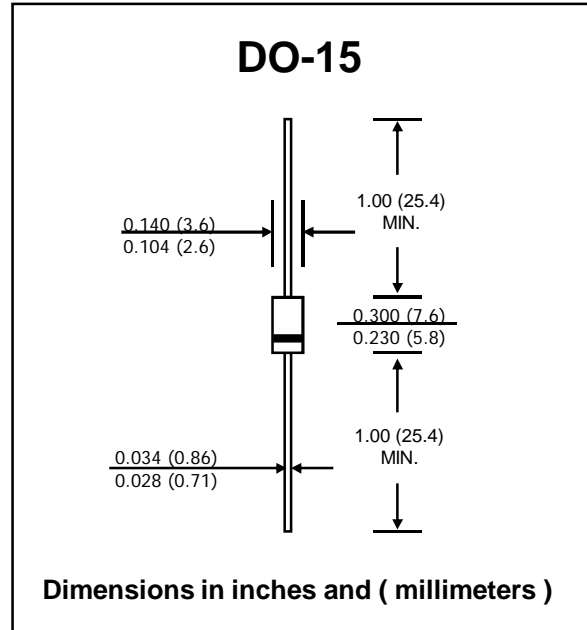
### FEATURES :

- \* Glass passivated junction chip
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* **Pb Free/RoHS**

### MECHANICAL DATA :

- \* Case : DO-15 Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.4 gram

## SILICON ZENER DIODES



### MAXIMUM RATINGS (T<sub>a</sub> = 25 °C)

Rating	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	1.5	W
Maximum Forward Voltage at I <sub>F</sub> = 0.2 A	V <sub>F</sub>	1.2	V
Operating Junction Temperature Range	T <sub>J</sub>	- 40 tdo + 150	°C
Storage Temperature Range	T <sub>STG</sub>	- 40 tdo + 150	°C



**ELECTRICAL CHARACTERISTICS** (Rating at 25 °C ambient temperature unless otherwise specified)

TYPE	Zener Voltage			Test Current	Maximum Zener Impedance	Maximum Reverse Current		Temp. coefficient of Zener Voltage	
	Vz @ IZT			IZT	ZzT @ IZT	IR @ VR		$\alpha_T$	(mV / °C)
	Min.	Typ.	Max.	(mA)	( $\Omega$ )	( $\mu$ A)	(V)	Min.	Max.
2Z12	10.8	12	13.2	10	30	5	10.2	8	13
2Z13	11.7	13	14.3	10	30	5	11.1	9	14
2Z15	13.5	15	16.5	10	30	5	12.8	11	17
2Z16	14.4	16	17.6	10	30	5	13.6	12	19
2Z18	16.2	18	19.8	10	30	5	15.3	14	23
2Z20	18.0	20	22.0	10	30	5	17.1	16	26
2Z22	19.8	22	24.2	10	30	5	18.8	18	28
2Z24	21.6	24	26.4	10	30	5	20.5	20	32
2Z27	24.3	27	29.7	10	30	5	23.1	23	36
2Z30	27.0	30	33.0	10	30	5	25.6	25	40
2Z33	29.7	33	36.3	10	30	5	28.2	26	41
2Z36	32.4	36	39.6	9	30	5	30.8	28	45
2Z43	38.7	43	47.3	7	40	5	34.4	33	53
2Z47	42.3	47	51.7	6	65	5	40.2	38	60
2Z51	45.9	51	56.1	6	65	5	43.6	43	68

RATING AND CHARACTERISTIC CURVES ( 2Z12 - 2Z51 )

Fig. 1 POWER TEMPERATURE DERATING CURVE

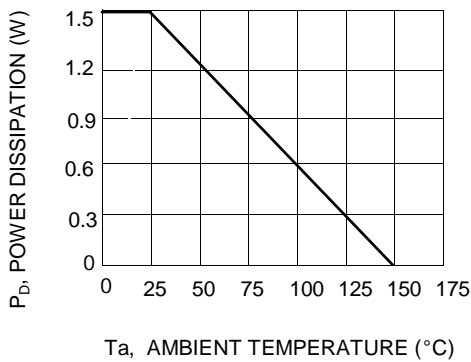


Fig. 2 TEMPERATURE COEFFICIENT

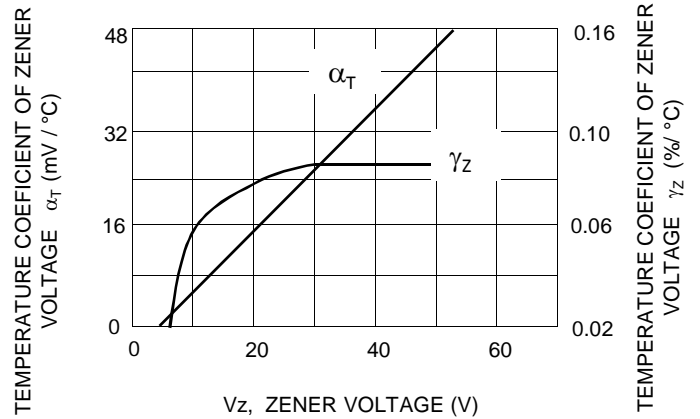


Fig. 3 TYPICAL REVERSE POWER CHARACTERISTICS

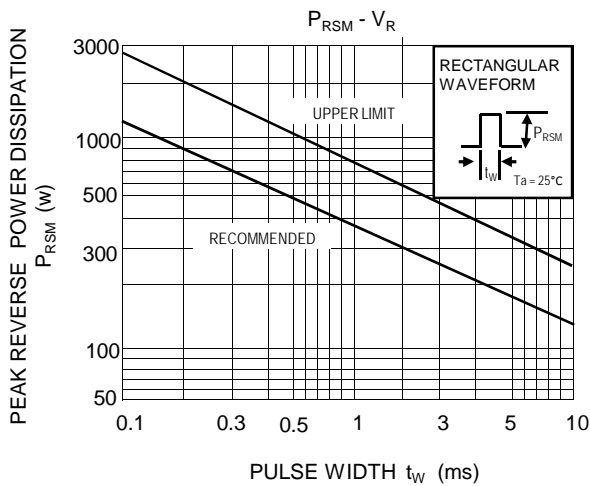


Fig. 4 TYPICAL TRANSIENT THERMAL IMPEDANCE

