

# 2EZ2.7D10 ~ 2EZ200D10

# SILICON ZENER DIODES

**V<sub>Z</sub> : 2.7 - 200 Volts**

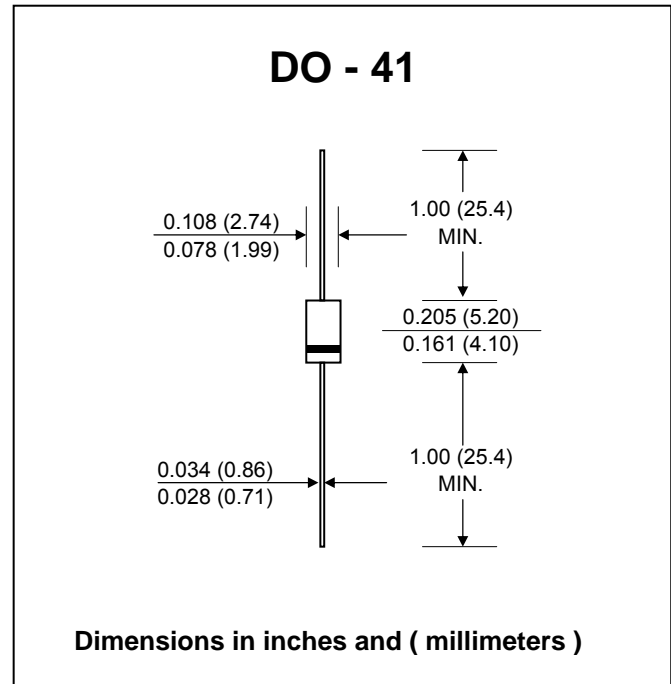
**P<sub>D</sub> : 2 Watts**

### FEATURES :

- \* Complete Voltage Range 2.7 to 200 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* ± 10% tolerance
- \* **RoHS / REACH Free**

### MECHANICAL DATA

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.339 gram



### MAXIMUM RATINGS

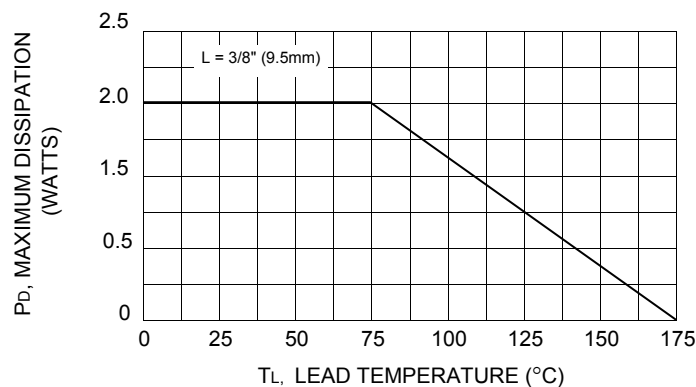
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T <sub>L</sub> = 75 °C (Note1)	P <sub>D</sub>	2.0	W
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	V
Junction Temperature Range	T <sub>J</sub>	- 55 to + 175	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 175	°C

**Note :**

(1) T<sub>L</sub> = Lead temperature at 3/8 " (9.5mm) from body

**Fig. 1 POWER TEMPERATURE DERATING CURVE**



## ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$	$I_{ZM}$	
	(V)	(mA)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu$ A)	(V)	(mA)
2EZ2.7D10	2.7	80	10	400	1.0	100	1.0	660
2EZ3.0D10	3.0	160	8.0	400	1.0	100	1.0	600
2EZ3.3D10	3.3	145	8.0	400	1.0	80	1.0	545
2EZ3.6D10	3.6	139	5.0	400	1.0	80	1.0	504
2EZ3.9D10	3.9	128	5.0	400	1.0	50	1.0	468
2EZ4.3D10	4.3	116	4.5	400	1.0	50	1.0	434
2EZ4.7D10	4.7	106	4.5	550	1.0	50	1.0	386
2EZ5.1D10	5.1	98.0	3.5	600	1.0	50	1.0	356
2EZ5.6D10	5.6	89.5	2.5	500	1.0	50	2.0	324
2EZ6.2D10	6.2	80.5	1.5	700	1.0	50	3.0	292
2EZ6.5D10	6.5	77.0	1.7	700	1.0	50	3.5	278
2EZ6.8D10	6.8	73.5	2.0	700	1.0	50	4.0	266
2EZ7.5D10	7.5	66.5	2.0	700	0.5	50	5.0	242
2EZ8.2D10	8.2	61.0	2.3	700	0.5	50	6.0	220
2EZ9.1D10	9.1	55.0	2.5	700	0.5	50	7.0	200
2EZ10D10	10	50.0	3.5	700	0.25	50	7.6	182
2EZ11D10	11	45.5	4.0	700	0.25	50	8.4	166
2EZ12D10	12	41.5	4.5	700	0.25	1.0	9.1	152
2EZ13D10	13	38.5	5.0	700	0.25	0.5	9.9	138
2EZ14D10	14	35.7	5.5	700	0.25	0.5	10.6	130
2EZ15D10	15	33.4	7.0	700	0.25	0.5	11.4	122
2EZ16D10	16	31.2	8.0	700	0.25	0.5	12.2	114
2EZ17D10	17	29.4	9.0	750	0.25	0.5	13.0	107
2EZ18D10	18	27.8	10	750	0.25	0.5	13.7	100
2EZ19D10	19	26.3	11	750	0.25	0.5	14.4	95
2EZ20D10	20	25.0	11	750	0.25	0.5	15.2	90
2EZ22D10	22	22.8	12	750	0.25	0.5	16.7	82
2EZ24D10	24	20.8	13	750	0.25	0.5	18.2	76
2EZ27D10	27	18.5	18	750	0.25	0.5	20.6	68
2EZ30D10	30	16.6	20	1000	0.25	0.5	22.5	60
2EZ33D10	33	15.1	23	1000	0.25	0.5	25.1	55
2EZ36D10	36	13.9	25	1000	0.25	0.5	27.4	50
2EZ39D10	39	12.8	30	1000	0.25	0.5	29.7	47
2EZ43D10	43	11.6	35	1500	0.25	0.5	32.7	43
2EZ47D10	47	10.6	40	1500	0.25	0.5	35.8	39
2EZ51D10	51	9.8	48	1500	0.25	0.5	38.8	36
2EZ56D10	56	9.0	55	2000	0.25	0.5	42.6	32

## ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$	$I_{ZM}$	
	(V)	(mA)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu$ A)	(V)	(mA)
2EZ62D10	62	8.1	60	2000	0.25	0.5	47.1	29
2EZ68D10	68	7.4	75	2000	0.25	0.5	51.7	27
2EZ75D10	75	6.7	90	2000	0.25	0.5	56.0	24
2EZ82D10	82	6.1	100	3000	0.25	0.5	62.2	22
2EZ91D10	91	5.5	125	3000	0.25	0.5	69.2	20
2EZ100D10	100	5.0	175	3000	0.25	0.5	76.0	18
2EZ110D10	110	4.5	250	4000	0.25	0.5	83.6	17
2EZ120D10	120	4.2	325	4500	0.25	0.5	91.2	15
2EZ130D10	130	3.8	400	5000	0.25	0.5	98.8	14
2EZ140D10	140	3.6	500	5500	0.25	0.5	106.4	13
2EZ150D10	150	3.3	575	6000	0.25	0.5	114.0	12
2EZ160D10	160	3.1	650	6500	0.25	0.5	121.6	11
2EZ170D10	170	2.9	675	7000	0.25	0.5	130.4	11
2EZ180D10	180	2.8	725	7000	0.25	0.5	136.8	10
2EZ190D10	190	2.6	825	8000	0.25	0.5	144.8	10
2EZ200D10	200	2.5	1900	9990	0.25	0.5	152.0	9.0

### Notes :

- (1) Suffix " 10 " indicates  $\pm 10\%$  tolerance, suffix " 5 " indicates  $\pm 5\%$  tolerance.
- (2) " EZ " will be omitted in marking on the diode