



KI SEMICONDUCTOR CO.

ZENER DIODES

3EZ1 - 3EZ200

Vz RANGE: 1.0, 3.9 - 200V

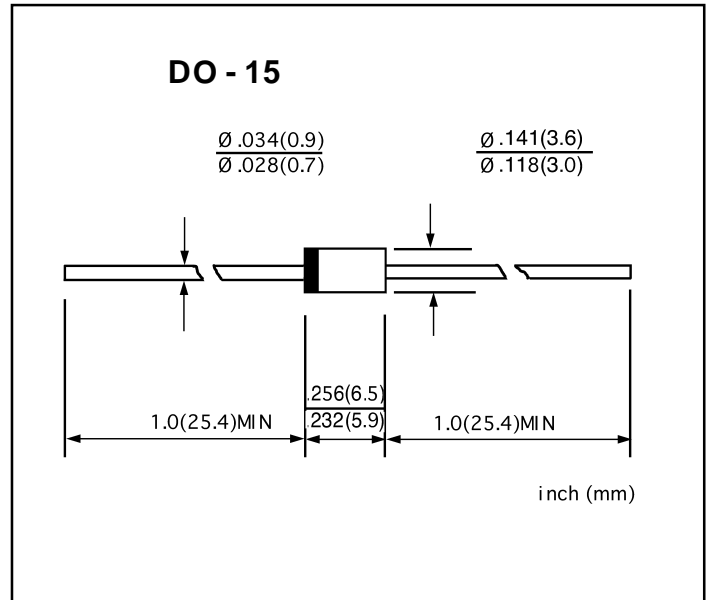
POWER DISSIPATION: 3.0 W

FEATURES

- ◇ For use in stabilizing and clipping circuits with high power rating.
- ◇ The zener voltages are graded according to the international E 12 standard. Smaller voltage tolerances are available upon request.

MECHANICAL DATA

- ◇ Case: DO-15, Plastic case
- ◇ Terminals: Solderable per MIL-STD-202, method 208
- ◇ Polarity: Cathode band
- ◇ Marking: Type number
- ◇ Approx. Weight: 0.39 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Zener current (see Table "Characteristics")			
Power dissipation at Tamb=25°C	P _{tot}	3 ⁽¹⁾	W
Thermal resistance junction to ambient air	R _{θJA}	40 ⁽¹⁾	°C/W
Junction temperature	T _J	-55---+150	°C
Storage temperature range	T _s	-55---+175	°C
Thermal resistance junction to ambient air	R _{thA}	<40	K/W ¹
Thermal resistance junction to Lead	R _{thL}	<15	K/W

NOTES: (1) Valid provided that leads are kept at ambient temperature at a distance of 10mm from case .

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Type	Nominal zener voltage	Test current	Maximum dynamic impedance	Typical temperature coefficient	Reverse voltage	Maximum regulator current
	V _Z @ I _{ZT}	I _{ZT}	I _{ZT}	α _{VZ}	I _R =1μA	I _{ZM} @ T _{amb} =50°C
	V	mA	Ω	%/°C	V	mA
3EZ1	0.71---0.82	100	0.5(<1)	-26 --- -16	-	2000
3EZ6.2	5.8---6.6	100	1(<2)	-1 --- +6	> 1.5	424
3EZ6.8	6.4---7.2	100	1(<2)	0 --- +7	> 2	389
3EZ7.5	7.0---7.9	100	1(<2)	0 --- +7	> 2	354
3EZ8.2	7.7---8.7	100	1(<2)	+3 --- +8	> 3.5	322
3EZ9.1	8.5---9.6	50	2(<4)	+3 --- +8	> 3.5	292
3EZ10	9.4---10.6	50	2(<4)	+5 --- +9	> 5	264
3EZ11	10.4---11.6	50	4(<7)	+5 --- +10	> 5	241
3EZ12	11.4---12.7	50	4(<7)	+5 --- +10	> 7	220
3EZ13	12.4---14.1	50	5(<10)	+5 --- +10	> 7	199
3EZ15	13.8---15.6	50	5(<10)	+5 --- +10	> 10	179
3EZ16	15.3---17.1	25	6(<15)	+6 --- +11	> 10	164
3EZ18	16.8---19.1	25	6(<15)	+6 --- +11	> 10	147
3EZ20	18.8---21.2	25	6(<15)	+6 --- +11	> 10	132
3EZ22	20.8---23.3	25	6(<15)	+6 --- +11	> 12	120
3EZ24	22.8---25.6	25	6(<15)	+6 --- +11	> 12	109
3EZ27	25.1---28.9	25	7(<15)	+6 --- +11	> 14	97
3EZ30	28---32	25	8(<15)	+6 --- +11	> 14	88
3EZ33	31---35	25	8(<15)	+6 --- +11	> 17	80
3EZ36	34---38	10	16(<40)	+6 --- +11	> 17	74
3EZ39	37---41	10	20(<40)	+6 --- +11	> 20	68
3EZ43	40---46	10	24(<45)	+7 --- +12	> 20	61
3EZ47	44---50	10	24(<45)	+7 --- +12	> 24	56
3EZ51	48---54	10	25(<60)	+7 --- +12	> 24	52
3EZ56	52---60	10	25(<60)	+7 --- +12	> 28	47
3EZ62	58---66	10	25(<80)	+8 --- +13	> 28	42
3EZ68	64---72	10	25(<80)	+8 --- +13	> 34	39
3EZ75	70---79	10	30(<100)	+8 --- +13	> 34	35
3EZ82	77---88	10	30(<100)	+8 --- +13	> 41	32
3EZ91	85---96	5	40(<200)	+9 --- +13	> 41	29
3EZ100	94---106	5	60(<200)	+9 --- +13	> 50	26
3EZ110	104---116	5	80(<250)	+9 --- +13	> 50	24
3EZ120	114---127	5	80(<250)	+9 --- +13	> 60	22
3EZ130	124---141	5	90(<300)	+9 --- +13	> 60	20
3EZ150	138---156	5	100(<300)	+9 --- +13	> 75	18
3EZ160	153---171	5	110(<350)	+9 --- +13	> 75	16
3EZ180	168---191	5	120(<350)	+9 --- +13	> 90	15
3EZ200	188---212	5	150(<350)	+9 --- +13	> 90	13