

# ZE1.3C

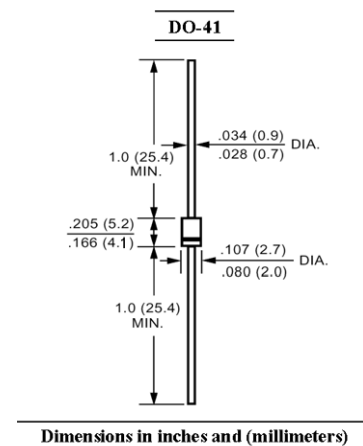
## SILICON PLANAR POWER ZENER DIODES

### Features

- Low dynamic resistance
- High reliability

### Mechanical Data

- **Case:** DO-41 Molded plastic
- **Epoxy:** UL 94V-0 rate flame retardant
- **Terminals:** Plated axial leads, solderable per MIL-STD-202 method 208C
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

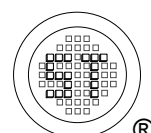
Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	1.3 <sup>1)</sup>	W
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 50 to + 200	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 9.5 mm from case are kept at ambient temperature.

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{thA}$	130 <sup>1)</sup>	K/W
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1	V

<sup>1)</sup> Valid provided that leads at a distance of 9.5 mm from case are kept at ambient temperature.



# ZE1.3C

## Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Type	Zener Voltage Range <sup>1)</sup>			Dynamic Resistance				Reverse Leakage Current	
	$V_{znom}$	$V_{ZT}$	at $I_{ZT}$	$Z_{ZT}$	at $I_{ZT}$	$Z_{ZK}$	at $I_{ZK}$	$I_R$	at $V_R$
	(V)	(V)	(mA)	Max. ( $\Omega$ )	(mA)	Max. ( $\Omega$ )	(mA)	Max. ( $\mu\text{A}$ )	(V)
ZE1.3C2V7	2.7	2.5...2.9	80	20	80	400	1	150	1
ZE1.3C3V0	3.0	2.8...3.2	80	20	80	400	1	100	1
ZE1.3C3V3	3.3	3.1...3.5	70	20	70	400	1	40	1
ZE1.3C3V6	3.6	3.4...3.8	60	15	60	500	1	20	1
ZE1.3C3V9	3.9	3.7...4.1	60	15	60	500	1	10	1
ZE1.3C4V3	4.3	4...4.6	50	13	50	500	1	3	1
ZE1.3C4V7	4.7	4.4...5	45	13	45	600	1	3	1
ZE1.3C5V1	5.1	4.8...5.4	45	10	45	500	1	1	1.5
ZE1.3C5V6	5.6	5.2...6	45	7	45	400	1	1	2
ZE1.3C6V2	6.2	5.8...6.6	35	4	35	300	1	1	3
ZE1.3C6V8	6.8	6.4...7.2	35	3.5	35	300	1	1	4
ZE1.3C7V5	7.5	7.0...7.9	35	3	35	200	0.5	1	4.5
ZE1.3C8V2	8.2	7.7...8.7	25	5	25	200	0.5	1	6.2
ZE1.3C9V1	9.1	8.5...9.6	25	5	25	200	0.5	1	6.8
ZE1.3C10	10	9.4...10.6	25	7	25	200	0.5	0.5	7
ZE1.3C11	11	10.4...11.6	20	8	20	300	0.5	0.5	8.2
ZE1.3C12	12	11.4...12.7	20	9	20	350	0.5	0.5	9.1
ZE1.3C13	13	12.4...14.1	20	10	20	400	0.5	0.5	10
ZE1.3C15	15	13.8...15.6	15	15	15	500	0.5	0.5	11
ZE1.3C16	16	15.3...17.1	15	15	15	500	0.5	0.5	12
ZE1.3C18	18	16.8...19.1	15	20	15	500	0.5	0.5	13
ZE1.3C20	20	18.8...21.2	10	24	10	600	0.5	0.5	15
ZE1.3C22	22	20.8...23.3	10	25	10	600	0.5	0.5	16
ZE1.3C24	24	22.8...25.6	10	25	10	600	0.5	0.5	18
ZE1.3C27	27	25.1...28.9	8	30	8	750	0.25	0.5	20
ZE1.3C30	30	28...32	8	30	8	1000	0.25	0.5	22
ZE1.3C33	33	31...35	8	35	8	1000	0.25	0.5	24
ZE1.3C36	36	34...38	8	40	8	1000	0.25	0.5	27
ZE1.3C39	39	37...41	6	50	6	1000	0.25	0.5	30
ZE1.3C43	43	40...46	6	50	6	1000	0.25	0.5	33
ZE1.3C47	47	44...50	4	90	4	1500	0.25	0.5	36
ZE1.3C51	51	48...54	4	115	4	1500	0.25	0.5	39
ZE1.3C56	56	52...60	4	120	4	2000	0.25	0.5	43
ZE1.3C62	62	58...66	4	125	4	2000	0.25	0.5	47
ZE1.3C68	68	64...72	4	130	4	2000	0.25	0.5	51
ZE1.3C75	75	70...79	4	135	4	2000	0.25	0.5	56
ZE1.3C82	82	77...87	2.7	200	2.7	3000	0.25	0.5	62
ZE1.3C91	91	85...96	2.7	250	2.7	3000	0.25	0.5	68
ZE1.3C100	100	94...106	2.7	350	2.7	3000	0.25	0.5	75
ZE1.3C110	110	104...116	2.7	450	2.7	4000	0.25	0.5	82
ZE1.3C120	120	114...127	2	550	2	4500	0.25	0.5	91
ZE1.3C130	130	124...141	2	700	2	5000	0.25	0.5	100
ZE1.3C150	150	138...156	2	1000	2	6000	0.25	0.5	110
ZE1.3C160	160	153...171	1.5	1100	1.5	6500	0.25	0.5	120
ZE1.3C180	180	168...191	1.5	1200	1.5	7000	0.25	0.5	130
ZE1.3C200	200	188...212	1.5	1500	1.5	8000	0.25	0.5	150

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .

