

FEATURES

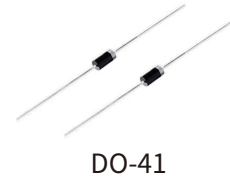
| The plastic package carries Underwriters Laboratory

Flammability Classification 94V-0

| Complete Voltage Range 3.6 to 200 Volts

| High peak reverse power dissipation

| High reliability



MECHANICAL DATA

| Case: DO-41 Molded plastic

| Polarity: Color band denotes cathode end

| Mounting position: Any

APPROVALS

RoHS | Compliance with 2011/65/EU

HF | Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
DC Power dissipation at $T_L = 75^{\circ}\text{C}$ (Note1)	P_D	2.0	W
Maximum forward voltage at $I_F=200\text{mA}$	V_F	1.2	V
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	60	$^{\circ}\text{C} / \text{W}$
Junction temperature range	T_J	-55 to +175	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +175	$^{\circ}\text{C}$

Note:

(1) T_L =Lead temperature at 3/8" (9.5mm)from body

(2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case

ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	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)	(Ω)	(Ω)	(mA)	(μ A)	(V)	(mA)
2EZ3.6D5	2EZ3.6D5	3.6	139	5.0	400	1.0	80	1.0	504
2EZ3.9D5	2EZ3.9D5	3.9	128	5.0	400	1.0	30	1.0	468
2EZ4.3D5	2EZ4.3D5	4.3	116	4.5	400	1.0	20	1.0	434
2EZ4.7D5	2EZ4.7D5	4.7	106	4.5	550	1.0	5.0	1.0	386
2EZ5.1D5	2EZ5.1D5	5.1	98.0	3.5	600	1.0	5.0	1.0	356
2EZ5.6D5	2EZ5.6D5	5.6	89.5	2.5	500	1.0	5.0	2.0	324
2EZ6.2D5	2EZ6.2D5	6.2	80.5	1.5	700	1.0	5.0	3.0	292
2EZ6.8D5	2EZ6.8D5	6.8	73.5	2.0	700	1.0	5.0	4.0	266
2EZ7.5D5	2EZ7.5D5	7.5	66.5	2.0	700	0.5	50	5.0	242
2EZ8.2D5	2EZ8.2D5	8.2	61.0	2.3	700	0.5	50	6.0	220
2EZ9.1D5	2EZ9.1D5	9.1	55.0	2.5	700	0.5	50	7.0	200
2EZ10D5	2EZ10D5	10	50.0	3.5	700	0.25	50	7.6	182
2EZ11D5	2EZ11D5	11	45.5	4.0	700	0.25	50	8.4	166
2EZ12D5	2EZ12D5	12	41.5	4.5	700	0.25	1.0	9.1	152
2EZ13D5	2EZ13D5	13	38.5	5.0	700	0.25	0.5	9.9	138
2EZ14D5	2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130
2EZ15D5	2EZ15D5	15	33.4	7.0	700	0.25	0.5	11.4	122
2EZ16D5	2EZ16D5	16	31.2	8.0	700	0.25	0.5	12.2	114
2EZ17D5	2EZ17D5	17	29.4	9.0	750	0.25	0.5	13.0	107
2EZ18D5	2EZ18D5	18	27.8	10	750	0.25	0.5	13.7	100
2EZ19D5	2EZ19D5	19	26.3	11	750	0.25	0.5	14.4	95
2EZ20D5	2EZ20D5	20	25.0	11	750	0.25	0.5	15.2	90
2EZ22D5	2EZ22D5	22	22.8	12	750	0.25	0.5	16.7	82
2EZ24D5	2EZ24D5	24	20.8	13	750	0.25	0.5	18.2	76
2EZ27D5	2EZ27D5	27	18.5	18	750	0.25	0.5	20.6	68
2EZ30D5	2EZ30D5	30	16.6	20	1000	0.25	0.5	22.5	60
2EZ33D5	2EZ33D5	33	15.1	23	1000	0.25	0.5	25.1	55
2EZ36D5	2EZ36D5	36	13.9	25	1000	0.25	0.5	27.4	50
2EZ39D5	2EZ39D5	39	12.8	30	1000	0.25	0.5	29.7	47
2EZ43D5	2EZ43D5	43	11.6	35	1500	0.25	0.5	32.7	43
2EZ47D5	2EZ47D5	47	10.6	40	1500	0.25	0.5	35.8	39
2EZ51D5	2EZ51D5	51	9.8	48	1500	0.25	0.5	38.8	36
2EZ56D5	2EZ56D5	56	9.0	55	2000	0.25	0.5	42.6	32

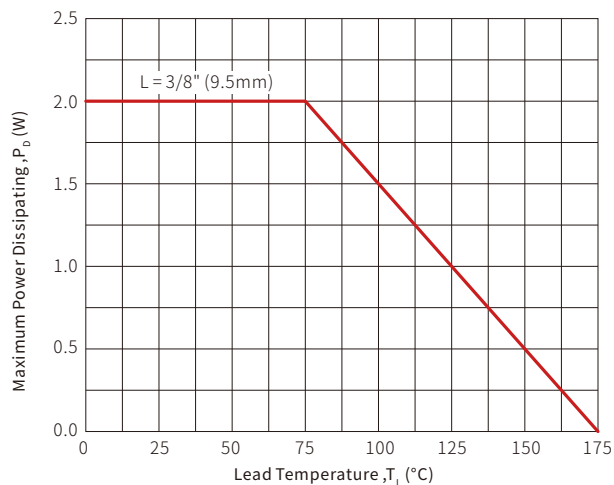
Part Number	Device Marking Code	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$		I_{ZM}
		(V)	(mA)	(Ω)	(Ω)	(mA)	(μ A)	(V)	(mA)
2EZ62D5	2EZ62D5	62	8.1	60	2000	0.25	0.5	47.1	29
2EZ68D5	2EZ68D5	68	7.4	75	2000	0.25	0.5	51.7	27
2EZ75D5	2EZ75D5	75	6.7	90	2000	0.25	0.5	56.0	24
2EZ82D5	2EZ82D5	82	6.1	100	3000	0.25	0.5	62.2	22
2EZ91D5	2EZ91D5	91	5.5	125	3000	0.25	0.5	69.2	20
2EZ100D5	2EZ100D5	100	5.0	175	3000	0.25	0.5	76.0	18
2EZ110D5	2EZ110D5	110	4.5	250	4000	0.25	0.5	83.6	17
2EZ120D5	2EZ120D5	120	4.2	325	4500	0.25	0.5	91.2	15
2EZ130D5	2EZ130D5	130	3.8	400	5000	0.25	0.5	98.8	14
2EZ140D5	2EZ140D5	140	3.6	500	5500	0.25	0.5	106.4	13
2EZ150D5	2EZ150D5	150	3.3	575	6000	0.25	0.5	114.0	12
2EZ160D5	2EZ160D5	160	3.1	650	6500	0.25	0.5	121.6	11
2EZ170D5	2EZ170D5	170	2.9	675	7000	0.25	0.5	130.4	11
2EZ180D5	2EZ180D5	180	2.8	725	7000	0.25	0.5	136.8	10
2EZ190D5	2EZ190D5	190	2.6	825	8000	0.25	0.5	144.8	10
2EZ200D5	2EZ200D5	200	2.5	900	8000	0.25	0.5	152.0	9.0

Note :

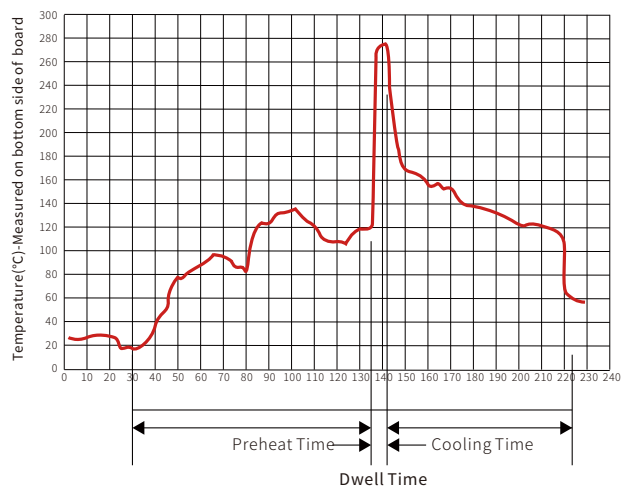
- (1) Suffix " 5 " indicates $\pm 5.0\%$ tolerance, suffix " 10 " indicates $\pm 10.0\%$ tolerance.
(2) " EZ " will be omitted in marking on the diode

CHARACTERISTIC CURVES

Fig.1-Power Temperature Derating Curve

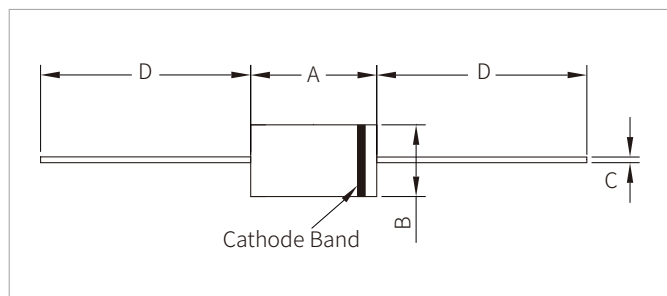


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

DO-41 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.10	5.20	0.160	0.205
B	2.00	2.70	0.080	0.107
C	0.50	0.86	0.020	0.034
D	25.40	-	1.000	-

ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
2EZ3.6D5- 2EZ200D5	DO-41	5000pcs	Box

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By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

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