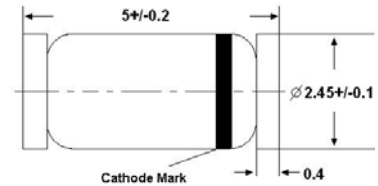


**Silicon Planar Power Zener Diodes**

for use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E 24 standard. Other tolerances and higher Zener voltages are upon request.

LL-41



**Glass case MELF**  
Dimensions in mm

**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	$T_{stg}$	- 55 to + 200	$^\circ\text{C}$
<sup>1)</sup> Valid provided that electrodes 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 $I_F = 200\text{ mA}$	$V_F$	1.2	V
<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.			



Characteristics at  $T_a = 25\text{ °C}$

Type	Zener Voltage Range <sup>1)</sup>			Dynamic Resistance			Reverse Current		Temp. Coefficient of Zener Voltage TKvz (%/K)
	$V_{znom}$	$V_{ZT}$	at $I_{ZT}$	$Z_{ZT}$	$Z_{ZK}$	at $I_{ZK}$	$I_R$	at $V_R$	
	(V)	(V)	(mA)	Max. ( $\Omega$ )	Max. ( $\Omega$ )	(mA)	Max. ( $\mu$ A)	(V)	
ZM85C2V7	2.7	2.5...2.9	80	20	400	1	150	1	-0.08...-0.05
ZM85C3V0	3	2.8...3.2	80	20	400	1	100	1	-0.08...-0.05
ZM85C3V3	3.3	3.1...3.5	70	20	400	1	40	1	-0.08...-0.05
ZM85C3V6	3.6	3.4...3.8	60	15	500	1	20	1	-0.08...-0.05
ZM85C3V9	3.9	3.7...4.1	60	15	500	1	10	1	-0.07...-0.02
ZM85C4V3	4.3	4...4.6	50	13	500	1	3	1	-0.07...+0.01
ZM85C4V7	4.7	4.4...5	45	13	600	1	3	1	-0.03...+0.04
ZM85C5V1	5.1	4.8...5.4	45	10	500	1	1	1.5	-0.01...+0.04
ZM85C5V6	5.6	5.2...6	45	7	400	1	1	2	0...+0.045
ZM85C6V2	6.2	5.8...6.6	35	4	300	1	1	3	+0.01...+0.055
ZM85C6V8	6.8	6.4...7.2	35	3.5	300	1	1	4	+0.015...+0.06
ZM85C7V5	7.5	7...7.9	35	3	200	0.5	1	4.5	+0.02...+0.065
ZM85C8V2	8.2	7.7...8.7	25	5	200	0.5	1	6.2	0.03...0.07
ZM85C9V1	9.1	8.5...9.6	25	5	200	0.5	1	6.8	0.035...0.075
ZM85C10	10	9.4...10.6	25	7	200	0.5	0.5	7	0.04...0.08
ZM85C11	11	10.4...11.6	20	8	300	0.5	0.5	8.2	0.045...0.08
ZM85C12	12	11.4...12.7	20	9	350	0.5	0.5	9.1	0.045...0.085
ZM85C13	13	12.4...14.1	20	10	400	0.5	0.5	10	0.05...0.085
ZM85C15	15	13.8...15.6	15	15	500	0.5	0.5	11	0.055...0.09
ZM85C16	16	15.3...17.1	15	15	500	0.5	0.5	12	0.055...0.09
ZM85C18	18	16.8...19.1	15	20	500	0.5	0.5	13	0.06...0.09
ZM85C20	20	18.8...21.2	10	24	600	0.5	0.5	15	0.06...0.09
ZM85C22	22	20.8...23.3	10	25	600	0.5	0.5	16	0.06...0.095
ZM85C24	24	22.8...25.6	10	25	600	0.5	0.5	18	0.06...0.095
ZM85C27	27	25.1...28.9	8	30	750	0.25	0.5	20	0.06...0.095
ZM85C30	30	28...32	8	30	1000	0.25	0.5	22	0.06...0.095
ZM85C33	33	31...35	8	35	1000	0.25	0.5	24	0.06...0.095
ZM85C36	36	34...38	8	40	1000	0.25	0.5	27	0.06...0.095
ZM85C39	39	37...41	6	50	1000	0.25	0.5	30	0.06...0.095
ZM85C43	43	40...46	6	50	1000	0.25	0.5	33	0.06...0.095
ZM85C47	47	44...50	4	90	1500	0.25	0.5	36	0.06...0.095
ZM85C51	51	48...54	4	115	1500	0.25	0.5	39	0.06...0.095
ZM85C56	56	52...60	4	120	2000	0.25	0.5	43	0.06...0.095
ZM85C62	62	58...66	4	125	2000	0.25	0.5	47	0.06...0.095
ZM85C68	68	64...72	4	130	2000	0.25	0.5	51	0.06...0.095
ZM85C75	75	70...79	4	135	2000	0.25	0.5	56	0.06...0.095

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

