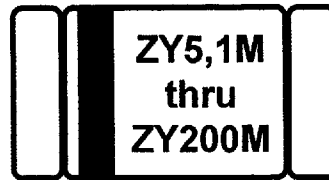


MELF-SMD 2.5 Watt



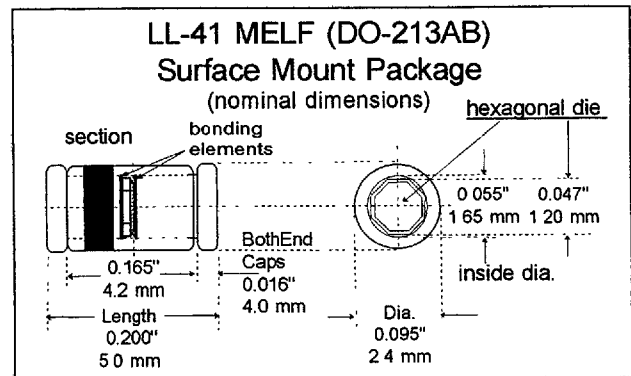
Zener Diodes

Use Advantages

- European Pro-Electron type specifications, in glass and produced in the US.
- Able to function in hostile environments i.e. ABS brakes and under the hood.
- Used where cost, surge and high performance are important.
- Functions as a low cost transient suppressor.
- Low cost replacement for high power plastic SMB zener diodes.
- Occupies the same footprint as SMB, no PC board rework.
- LL-41 MELF vs. SMB - savings up to 50% are possible.
- May be used on ceramic boards along with high temperature IR solder reflow.

Features

- Six Sigma quality
- Humidity proof glass
- Thermally matched system
- No thermal fatigue
- No applications restrictions
- BKC's Sigma Bond™ plating for problem free solderability
- DO-41 leaded glass types available



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at End Cap temperature of 25 °C	P_{tot}	2.5	Watts
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{st}	-55 to +200	°C
Exponential peak power surge for 1 mSec. @ 50% of I_p	P_{pk}	300	Watts

Characteristics at $T_{amb} = 25\text{ °C}$	Symbol	Limit	Unit
Power Derating at End Cap temperature of 25 °C	P_{DR}	16.67 (Max)	mW/°C
Forward Voltage at $I_F = 1.0\text{ Amp}$	V_F	1.1 (Max)	Volts

BKC can provide zener voltages above 200 volts in high quantities, consult factory for quotation.

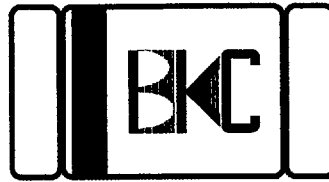
For a DO-41 leaded glass package, drop the "M" suffix of the part number.

DETAILED SPECIFICATIONS ON REVERSE



6 Lake Street
Lawrence, MA
USA 01841

Telephone (508) 681-0392 • FAX (508) 681-9135

MELF-SMD 2.5 Watt**ZY5,1M thru ZY200M****Zener Diodes**

Detail Specifications

Type	Nominal Zener Voltage ⁽¹⁾ (V _Z) @ I _{ZT} Volts	Test Current I _{ZT} mA	Maximum Zener Impedance (Z _{ZT}) @ I _{ZT} Ohms	Maximum Reverse Voltage (V _R) @ I _R =1.0μA Volts	Typical Temperature Coefficient @ I _{ZT} mV/°C	Maximum Regulator Current (I _{ZM}) mA
ZY5,1M■	5.1	100	5	-	-5	300
ZY5,6M■	5.6	100	2	>1.5	+10	275
ZY6,2M■	6.2	100	2	>1.5	+25	245
ZY6,8M	6.8	100	2	>2	+35	200
ZY7,5M	7.5	100	2	>2	+35	200
ZY8,2M	8.2	100	2	>3.5	+55	180
ZY9,1M	9.1	50	4	>3.5	+55	165
ZY10M	10	50	4	>5	+70	145
ZY11M	11	50	7	>5	+75	135
ZY12M	12	50	7	>7	+75	120
ZY13M	13	50	10	>7	+75	110
ZY15M	15	50	10	>10	+75	98
ZY16M	16	25	15	>10	+90	90
ZY18M	18	25	15	>10	+90	80
ZY20M	20	25	15	>10	+90	72
ZY22M	22	25	15	>12	+90	66
ZY24M	24	25	15	>12	+95	60
ZY27M	27	25	15	>14	+95	53
ZY30M	30	25	15	>14	+95	48
ZY33M	33	25	15	>17	+95	44
ZY36M	36	10	40	>17	+95	40
ZY39M	39	10	40	>20	+100	37
ZY43M	43	10	45	>20	+105	33
ZY47M	47	10	45	>24	+105	30
ZY51M	51	10	60	>24	+105	27
ZY56M	56	10	60	>28	+105	25
ZY62M	62	10	80	>28	+105	21
ZY68M	68	10	80	>34	+105	20
ZY75M	75	10	100	>34	+105	18
ZY82M	82	10	100	>41	+105	16
ZY91M	91	5	200	>41	+110	15
ZY100M	100	5	200	>50	+110	13
ZY110M	110	5	250	>50	+110	12
ZY120M	120	5	250	>60	+110	11
ZY130M	130	5	300	>60	+110	10
ZY150M	150	5	300	>75	+110	9
ZY160M	160	5	350	>75	+110	8.5
ZY180M	180	5	350	>90	+110	8
ZY200M	200	5	350	>90	+110	7.5

ZYM family has voltage tolerances of ± 6 %. ■ suffix parts are under development.

For DO-41 leaded glass packages, drop the "M" suffix on the part number.

⁽¹⁾ Tested with pulses tp = 20mSecs.



6 Lake Street
Lawrence, MA
USA 01841

Telephone (508) 681-0392 • FAX (508) 681-9135