
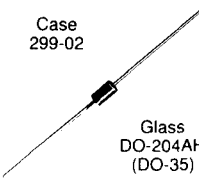

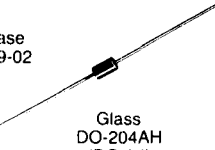


General-Purpose Regulator Diodes

Nominal Zener Voltage	250 mW		250 mW		350 mW		400 mW		500 mW	
	Low Level Cathode = Polarity Mark	Low Noise Cathode = Polarity Mark	Low Level Cathode = Polarity Mark	Low Noise Cathode = Polarity Mark	Cathode = Polarity Mark		Low Leakage Cathode = Polarity Mark	Cathode = Polarity Mark		
(*Note 1)	(*Notes 2,3,14)		(*Notes 2,3,18)		(*Notes 2,6,17)		(*Notes 2,4,18)	(*Notes 2,5,18)		(*Notes 2,6,18)
	 Glass Case 362-01		 Case 299-02 Glass DO-204AH (DO-35)		 Case 318-02,-03 Style 8 SOT-23 (TO-236AA/AB)		 Case 299-02 Glass DO-204AH (DO-35)			
1.8	MLL4678	MLL4614	1N4678	1N4614					1N4370A	1N5221 B
2.0	MLL4679	MLL4615	1N4679	1N4615						
2.2	MLL4680	MLL4616	1N4680	1N4616						
2.4	MLL4681	MLL4617	1N4681	1N4617						
2.5										
2.7	MLL4682	MLL4618	1N4682	1N4618					1N4371A	1N5223 B
2.8										
3.0	MLL4683	MLL4619	1N4683	1N4619					1N4372A	1N5225 B
3.3	MLL4684	MLL4620	1N4684	1N4620	MMBZ5226		1N5518B		1N746 A	1N5226 B
3.6	MLL4685	MLL4621	1N4685	1N4621	MMBZ5227		1N5519B	1N747 A	1N5227 B	1N5227 B
3.9	MLL4686	MLL4622	1N4686	1N4622	MMBZ5228		1N5520B	1N748 A	1N5228 B	1N5228 B
4.3	MLL4687	MLL4623	1N4687	1N4623	MMBZ5229	BZX84C4V3	1N5521 B	1N749 A	1N5229 B	1N5229 B
4.7	MLL4688	MLL4624	1N4688	1N4624	MMBZ5230	BZX84C4V7	1N5522B	1N750 A	1N5230 B	1N5230 B
5.1	MLL4689	MLL4625	1N4689	1N4625	MMBZ5231	BZX84C5V1	1N5523B	1N751 A	1N5231 B	1N5231 B
5.6	MLL4690	MLL4626	1N4690	1N4626	MMBZ5232	BZX84C5V6	1N5524 B	1N752 A	1N5232 B	1N5232 B
6.0					MMBZ5233					
6.2	MLL4691	MLL4627	1N4691	1N4627	MMBZ5234	BZX84C6V2	1N5525 B	1N753 A	1N5234 B	1N5234 B
6.8	MLL4692	MLL4099	1N4692	1N4099	MMBZ5235	BZX84C6V8	1N5526B	1N754 A	1N5235 B	1N5235 B
								1N957 B		
7.5	MLL4693	MLL4100	1N4693	1N4100	MMBZ5236	BZX84C7V5	1N5527B	1N755 A	1N5236 B	1N5236 B
								1N958 B		
8.2	MLL4694	MLL4101	1N4694	1N4101	MMBZ5237	BZX84C8V2	1N5228B	1N756 A	1N5237 B	1N5237 B
								1N959 B		
8.7	MLL4695	MLL4102	1N4695	1N4102	MMBZ5238					1N5238 B
9.1	MLL4696	MLL4103	1N4696	1N4103	MMBZ5239	BZX84C9V1	1N5529B	1N757 A	1N5239 B	1N5239 B
								1N960 B		
10	MLL4697	MLL4104	1N4697	1N4104	MMBZ5240	BZX84C10	1N5530B	1N758 A	1N5240 B	1N5240 B
								1N961 B		
11	MLL4698	MLL4105	1N4698	1N4105	MMBZ5241	BZX84C11	1N5531B	1N962 B	1N5241 B	1N5241 B
12	MLL4699	MLL4106	1N4699	1N4106	MMBZ5242	BZX84C12	1N5532B	1N759 A	1N5242 B	1N5242 B
								1N963 B		
13	MLL4700	MLL4107	1N4700	1N4107	MMBZ5243	BZX84C13	1N5533B	1N964B	1N5243 B	1N5243 B
14	MLL4701	MLL4108	1N4701	1N4108	MMBZ5244		1N5334B		1N5244 B	1N5244 B
15	MLL4702	MLL4109	1N4702	1N4109	MMBZ5245	BZX84C15	1N5335 B	1N965B	1N5245 B	1N5245 B
16	MLL4703	MLL4110	1N4703	1N4110	MMBZ5246	BZX84C16	1N5336 B	1N966B	1N5246 B	1N5246 B
17	MLL4704	MLL4111	1N4704	1N4111	MMBZ5247		1N5337B		1N5247 B	1N5247 B
18	MLL4705	MLL4112	1N4705	1N4112	MMBZ5248	BZX84C18	1N5338B	1N967B	1N5248 B	1N5248 B
19	MLL4706	MLL4113	1N4706	1N4113	MMBZ5249		1N5539B		1N5249 B	1N5249 B
20	MLL4707	MLL4114	1N4707	1N4114	MMBZ5250	BZX84C20	1N5540B	1N968 B	1N5250 B	1N5250 B
22	MLL4708	MLL4115	1N4708	1N4115	MMBZ5251	BZX84C22	1N5541B	1N969 B	1N5251 B	1N5251 B
24	MLL4709	MLL4116	1N4709	1N4116	MMBZ5252	BZX84C24	1N5542B	1N970 B	1N5252 B	1N5252 B
25	MLL4710	MLL4117	1N4710	1N4117	MMBZ5253		1N5543B		1N5253 B	1N5253 B
27	MLL4711	MLL4118	1N4711	1N4118	MMBZ5254	BZX84C27		1N971 B	1N5254 B	1N5254 B
28	MLL4712	MLL4119	1N4712	1N4119	MMBZ5255		1N5544B		1N5255 B	1N5255 B
30	MLL4713	MLL4120	1N4713	1N4120	MMBZ5256	BZX84C30	1N5545B	1N972 B	1N5256 B	1N5256 B
33	MLL4714	MLL4121	1N4714	1N4121	MMBZ5257	BZX84C33	1N5546B	1N973 B	1N5257 B	1N5257 B
36	MLL4715	MLL4122	1N4715	1N4122				1N974 B	1N5258 B	1N5258 B
39	MLL4716	MLL4123	1N4716	1N4123				1N975 B	1N5259 B	1N5259 B
43	MLL4717	MLL4124	1N4717	1N4124				1N976 B	1N5260 B	1N5260 B
47		MLL4125		1N4125				1N977 B	1N5261 B	1N5261 B
51		MLL4126		1N4126				1N978 B	1N5262 B	1N5262 B
56		MLL4127		1N4127				1N979 B	1N5263 B	1N5263 B
60		MLL4128		1N4128					1N5264 B	1N5264 B
62		MLL4129		1N4129				1N980 B	1N5265 B	1N5265 B
68		MLL4130		1N4130				1N981 B	1N5266 B	1N5266 B
75		MLL4131		1N4131				1N982 B	1N5267 B	1N5267 B
82		MLL4132		1N4132				1N983 B	1N5268 B	1N5268 B
87		MLL4133		1N4133					1N5269 B	1N5269 B
91		MLL4134		1N4134				1N984 B	1N5270 B	1N5270 B
100		MLL4135		1N4135				1N985 B	1N5271 B	1N5271 B
110								1N986 B	1N5272 B	1N5272 B
120								†1N987 B	1N5273 # B	1N5273 # B
130								†1N988 B	1N5274 # B	1N5274 # B
140									1N5275 # B	1N5275 # B
150								†1N989 B	1N5276 # B	1N5276 # B
160								†1N990 B	1N5277 # B	1N5277 # B
170									1N5278 # B	1N5278 # B
180								†1N991 B	1N5279 # B	1N5279 # B
200								†1N992 B	1N5281 # B	1N5281 # B

□ JAN JANTX(V) available, ± 5% only.

† 1N987-1N992 supplied in DO-7 glass package.

See Notes on page 57

SURFACE MOUNT PRODUCTS — SOT-23 (continued)

SOT-23 Zener Diodes

Pinout 1-Anode, 2-N.C., 3-Cathode (Tolerance $\pm 5\%$)

VZ (Nom) Volts	U.S. Standards	Device Marking	Pro-Electron Equivalent	Device Marking
3.3	MMBZ5226	8A		
3.6	MMBZ5227	8B		
3.9	MMBZ5228	8C		
4.3	MMBZ5229	8D	BZX84C4V3	W9
4.7	MMBZ5230	8E	BZX84C4V7	Z1
5.1	MMBZ5231	8F	BZX84C5V1	Z2
5.6	MMBZ5232	8G	BZX84C5V6	Z3
6.0	MMBZ5233	8H		
6.2	MMBZ5234	8J	BZX84C6V2	Z4
6.8	MMBZ5235	8K	BZX84C6V8	Z5
7.5	MMBZ5236	8L	BZX84C7V5	Z6
8.2	MMBZ5237	8M	BZX84C8V2	Z7
8.7	MMBZ5238	8N		
9.1	MMBZ5239	8P	BZX84C9V1	Z8
10.0	MMBZ5240	8Q	BZX84C10	Z9
11.0	MMBZ5241	8R	BZX84C11	Y1
12.0	MMBZ5242	8S	BZX84C12	Y2
13.0	MMBZ5243	8T	BZX84C13	Y3
14.0	MMBZ4244	8U		
15.0	MMBZ5245	8V	BZX84C15	Y4
16.0	MMBZ5246	8W	BZX84C16	Y5
17.0	MMBZ5247	8X		
18.0	MMBZ5248	8Y	BZX84C18	Y6
19.0	MMBZ5249	8Z		
20.0	MMBZ5250	81A	BZX84C20	Y7
22.0	MMBZ5251	81B	BZX84C22	Y8
24.0	MMBZ5252	81C	BZX84C24	Y9
25.0	MMBZ5253	81D		
27.0	MMBZ5254	81E	BZX84C27	Y10
28.0	MMBZ5255	81F		
30.0	MMBZ5256	81G	BZX84C30	Y11
33.0	MMBZ5257	81H	BZX84C33	Y12

3

SOT-23 Silicon Controlled Rectifier

Rectifier Pinouts: 1-Cathode, 2-Gate, 3-Anode

Device	Marking	I _F (mA)	V _{FXM} (mA)	I _{GT} (μ A)	V _{GT} (V)	I _H (mA)
MMBS5062	5T	500	100	200	0.8	5
MMBS5061	5S	500	50	200	0.8	5
MMBS5060	5R	500	25	200	0.8	5

SOT-23 Silicon Programmable Unijunction Transistors

Transistor Pinouts: 1-Cathode, 2-Gate, 3-Anode

Device	Marking	I _{TRM} (Amp) (1)	I _{TSM} (Amp) (2)	Max (μ A) I _p (3)	Min (V) V _T	Max (V)	Max (μ A) I _y (3)	Max (V) V _F
MMBPU131	5Z	1	1	2	0.2	0.7	50	1.5

Notes: (1) Repetitive Peak Forward Current — 100 μ s Pulse Width, 1.0% Duty Cycle
 (2) Non-repetitive Peak Forward Current — 10 μ s Pulse Width
 (3) V_s = 10 Vdc, R_G = 1.0 m Ω