SILICON DIODES

Silicon Switching Diodes for Computer Applications in DO-35 & LL-34/35 Packages

Type	Peak Inverse Voltage (MIN.) (PIV) Volts	Maximum Average Rectified Current (I_O) mA	Maximum Power Dissipation @ 25° C (P_D) mW	Maximum Forward Voltage Drop (V_F) Volts	Maximum Forward Voltage Drop @ I_F mA	Maximum Reverse Leakage Current (I_R) nA	Maximum Reverse Leakage Current @ V_R Volts	Maximum Reverse Recovery (NOTE 1) (t_{rr}) nS
BAW75	35	150	500	1.0	30	100	25	2
BAW76	75	150	500	1.0	100	100	50	2
BKC600	75	200	500	1.0	200	100	50	4
1N914 ✔	**100**	**200**	**250**	**1.0**	**10**	**25**	**20**	**4**
1N914A	100	200	250	1.0	20	25	20	4
1N914B	100	200	250	1.0	100	25	20	4
1N916	100	200	250	1.0	10	25	20	2
1N916A	100	200	250	1.0	20	25	20	2
1N916B	100	200	250	1.0	30	25	20	2
1N3064	75	100	250	1.0	10	100	50	4
1N3600	75	200	500	1.0	200	100	50	4
1N4009	35	100	250	1.0	30	100	25	4
1N4148 ✔	**100**	**200**	**500**	**1.0**	**10**	**25**	**20**	**4**
1N4149	100	200	500	1.0	10	25	20	4
1N4150 ✔	**75**	**200**	**500**	**1.0**	**200**	**100**	**50**	**4**
1N4151	75	100	500	1.0	50	50	50	2
1N4152	75	100	500	1.0	50	50	50	2
1N4153 ✔	**75**	**100**	**500**	**0.88**	**20**	**50**	**50**	**2**
1N4154	35	100	500	1.0	30	100	25	2
1N4446	100	200	500	1.0	20	25	20	4
1N4447	100	200	500	1.0	20	25	20	4
1N4448	100	200	500	1.0	100	25	20	4
1N4449	100	200	500	1.0	30	25	20	4
1N4450	40	200	500	1.0	200	50	30	4
1N4454 ✔	**75**	**100**	**500**	**1.0**	**10**	**100**	**50**	**4**
1N4607	85	200	500	1.1	400	100	50	10
1N4608	85	200	500	0.96	350	100	50	10

Note 1: $I_F = I_R$, t_{rr} @ 0.1 I_R

For MELF surface mount package, replace "1N" prefix with "LL"

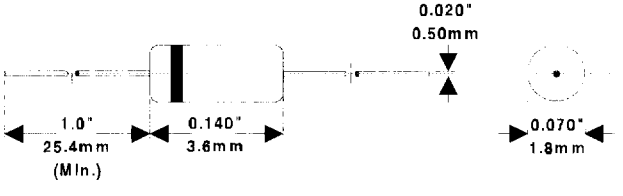
1N6638 Series • Hard Glass Silicon Diodes in Voidless Tungsten DO-35 Package

Type	Peak Inverse Voltage (MIN.) (PIV) Volts	Maximum Average Rectified Current (I_O) mA	Maximum Power Dissipation @ 25° C (P_D) mW	Maximum Forward Voltage Drop (V_F) Volts	Maximum Forward Voltage Drop @ I_F mA	Maximum Reverse Leakage Current (I_R) nA	Maximum Reverse Leakage Current @ V_R Volts	Maximum Reverse Recovery (NOTE 1) (t_{rr}) nS
1N6638 ✔	**150**	**300**	**750**	**1.1**	**200**	**25**	**20**	**4.5**
1N6642 ✔	**100**	**300**	**750**	**1.2**	**100**	**25**	**20**	**5.0**
1N6643 ✔	**75**	**300**	**750**	**1.2**	**100**	**25**	**20**	**6.0**

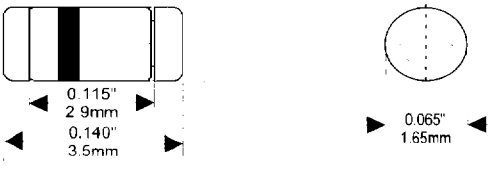
Note 1: $I_F = I_R$, t_{rr} @ 0.1 I_R

✔ *Mil-Approved Devices, See Page 5 for Level of Qual*

DO-35 Glass Package
(nominal dimensions)



LL-34/35 MINI-MELF Surface Mount Package
(nominal dimensions)



BKC 2000 Series • High Voltage, General Purpose Silicon Diodes in D0-35 & LL-34/35 Packages

Type	Peak Inverse Voltage (MIN.) (PIV) Volts	Maximum Average Rectified Current (I_O) mA	Maximum Power Dissipation @ 25°C (P_D) mW	Maximum Forward Voltage Drop (V_F) Volts	@ I_F mA	Maximum Reverse Leakage Current (I_R) nA	@ V_R Volts	Maximum Reverse Recovery (NOTE 1) (t_{rr}) ns
BA170	20	150	300	1.0	80	50	10	100
BAV17	25	200	400	1.0	100	100	20	50
BAV18	60	200	400	1.0	100	100	100	50
BAV19	120	200	400	1.0	100	100	100	50
BAV20	200	200	400	1.0	100	100	150	50
BAV21	250	200	400	1.0	100	100	200	50
BAY80	120	200	400	1.0	150	100	120	50
1N658	120	200	500	1.0	100	50	50	300
1N659	60	200	500	1.0	6	5000	50	–
1N660	120	200	500	1.0	6	5000	100	–
1N661	240	200	500	1.0	6	10000	200	300
1N3070	200	200	500	1.0	100	100	175	50
1N4938 ✔	**200**	**200**	**500**	**1.0**	**100**	**100**	**175**	**50**

Note 1: $I_F = I_R$, t_{rr} @ 0.1 I_R

For MELF surface mount package, replace "1N" prefix with "LL"

BKC 3000 Series • Low Leakage Silicon Diodes in DO-35 & LL-34/35 Packages

Type	Peak Inverse Voltage (MIN.) (PIV) Volts	Maximum Average Rectified Current (I_O) mA	Maximum Power Dissipation @ 25°C (P_D) mW	Maximum Forward Voltage Drop (V_F) Volts	@ I_F mA	Maximum Reverse Leakage Current (I_R) nA	@ V_R Volts	Maximum Reverse Recovery (NOTE 1) (t_{rr}) nS
BKC300	150	200	500	1.0	200	2.0	125	6.0
BKC333	150	200	500	1.1	200	3.0	125	6.0
1N456	30	200	500	1.0	40	25	25	10.0
1N456A	30	200	500	1.0	100	25	25	–
1N457	70	200	500	1.0	20	25	60	–
1N457A	70	200	500	1.0	100	25	60	–
1N458	150	200	500	1.0	7	25	125	–
1N458A	150	200	500	1.0	100	5	125	–
1N459	200	200	500	1.0	100	25	175	–
1N459A	200	200	500	1.0	200	25	175	–
1N461A	30	200	500	1.0	100	50	10	–
1N462A	70	200	500	1.0	100	500	60	–
1N463A	200	200	400	1.0	100	500	175	–
1N482B	40	200	500	1.0	100	25	36	–
1N483B	150	150	400	1.0	100	25	125	–
1N484B	150	150	400	1.0	100	250	125	–
1N485B	200	150	400	1.0	100	25	175	–
1N486	250	150	400	1.1	100	250	225	–
1N486B	250	150	400	1.1	100	25	225	–
1N3595 ✔	**150**	**200**	**500**	**1.0**	**200**	**1.0**	**125**	**–**
1N5194 ✔	**80**	**200**	**500**	**1.0**	**100**	**25**	**70**	**–**
1N5195 ✔	**200**	**200**	**500**	**1.0**	**100**	**25**	**180**	**–**
1N5196 ✔	**250**	**50**	**500**	**1.0**	**100**	**25**	**225**	**–**

Note 1: $I_F = I_R = 10mA$, t_{rr} @ 1mA

For MELF surface mount package, replace "1N" prefix with "LL"

✔ Mil-Approved Devices, See Page 5 for Level of Qual

BE110 Series • Ultra Low Leakage Silicon Diodes in D0-35 & LL-34/35 Packages

	Maximum Forward Voltage Drop				Maximum Reverse Leakage Current		Typical Reverse Recovery (NOTE 1) @ 1mA
	@ 10μA (V_F)	@ 1.0mA (V_F)	@ 50mA (V_F)	@ 100mA (V_F)	(I_R)	@ V_R	(t_{rr})
Type	**Volts**	**Volts**	**Volts**	**Volts**	**Pico Amps**	**Volts**	**nS**
BE110	0.60	0.78	—	1.2	2000	30	250
BE111	0.60	0.78	—	1.2	200	20	250
BE112	—	—	1.0	1.2	100	20	250
BE113	—	—	1.0	1.2	250	20	250
BE114	0.60	0.78	—	1.2	2000	50	250

Note 1: $I_F = I_R = 10mA$, t_{rr} @ 1mA.
For MELF surface mount package, add "L" prefix
Call factory for other leakage selections.

Silicon Stabistor Multi-Chip Diodes in D0-35 Package

	Number of Die	Peak Inverse Voltage (MIN.) (PIV)	Maximum Forward Voltage Drop @ 10μA (V_F)	@ 1.0mA (V_F)	@ 100mA (V_F)	Maximum Reverse Leakage Current (I_R)	@ V_R	Maximum Reverse Stored Charge @ 10mA (QS)
Type		**Volts**	**Volts**	**Volts**	**mA**	**nA**	**Volts**	**pC**
1N4156	2	30	1.09	1.41	1.84	50	20	500
1N4157	3	30	1.54	2.05	2.66	50	20	500
1N4829	2	30	—	1.44	1.87	100	20	—
1N4830	3	30	—	2.08	2.69	100	20	—
MPD200	2	30	1.00	1.34	1.76	30	30	400
MPD300	3	60	1.54	2.03	2.65	30	30	400