

# semtron SEMICONDUCTORS

Semitronics Corp.

discrete devices

T-23-01

## special package silicon rectifiers

### high voltage axial lead silicon cartridge rectifiers

JEDEC Type No.	Peak Inverse Voltage (volts) (Note 1)	Max. RMS Input (volts) (Note 2)	Max. Rectified DC Output Current (mA)			Max. DC Forward Voltage Drop @ 100 mADC (volts)	Max. DC Reverse Current @ Rated PIV ( $\mu$ A)		8 Millisecond Surge (Amps)	Case Style	Package Dimensions	
			@ 25°C	@ 50°C	@ 100°C		@ 25°C	@ 100°C			Length L (Inches)	Diameter D (Inches)
1N596*	600	420	150	—	90	3	10	100	—	A-48c	.500	.375
1N597	800	560	150	—	90	3	10	100	—	A-48c	.500	.375
1N598*	1000	700	150	—	90	3	10	100	—	A-48c	.500	.375
1N1406	600	420	125	—	70	5	10	100	—	A-48c	.500	.375
1N1407	800	560	125	—	70	5	10	100	—	A-48c	.500	.375
1N1408	1000	700	125	—	70	5	10	100	—	A-48c	.500	.375
1N1409	1200	840	125	—	70	5	10	100	—	A-48c	.500	.375
1N1410	1500	1050	125	—	70	6.25	10	100	—	A-48c	.500	.375
1N1411	1800	1260	125	—	70	7.50	10	100	—	A-48c	.500	.375
1N1412	2000	1400	125	—	70	6.25	10	100	—	A-48d	1.000	.375
1N1413	2400	1680	125	—	70	7.50	10	100	—	A-48d	1.000	.375
1N1730	1000	700	200	—	100	5	10	100	—	A-48c	.500	.375
1N1731*	1500	1050	200	—	100	5	10	100	30	A-48c	.500	.375
1N1732	2000	1400	200	—	100	9	10	100	30	A-48c	.500	.375
1N1733*	3000	2100	150	—	75	12	10	100	30	A-48d	1.000	.375
1N1734*	5000	3500	100	—	50	18	10	100	30	A-48e	1.000	.500
1N2373	600	420	—	800	—	—	10	—	30	HL-8a	.500	.350
1N2374	1000	700	—	800	—	—	10	—	30	HL-8a	.500	.350
1N2375	1500	1050	—	500	—	—	10	—	30	HL-8a	.500	.350
1N2376	2000	1400	—	400	—	—	10	—	30	HL-8b	.900	.350
1N2377	2400	1680	—	400	—	—	10	—	30	HL-8b	.900	.350
1N2378	3000	2100	—	250	—	—	10	—	30	HL-8c	1.000	.350
1N2379	4000	2800	—	250	—	—	10	—	30	HL-8d	1.250	.350
1N2380	6000	4200	—	250	—	—	10	—	30	HL-8e	2.500	.350
1N2381	10000	7000	—	250	—	—	10	—	30	HL-8e	2.500	.350
1N2382*	4000	2800	—	200	—	18	10	—	30	HL-8f	.500	.375
1N2383*	6000	4200	—	200	—	27	10	—	30	HL-8g	1.500	.500
1N2384*	8000	5600	—	200	—	27	10	—	30	HL-8g	1.500	.500
1N2385*	10000	7000	—	200	—	39	10	—	30	HL-8h	2.000	.500
1N3052	12000	8450	—	—	125	20	10	—	30	HL-9a	4.000	—
1N3053	14000	9900	—	—	125	24	10	—	30	HL-9a	4.000	—
1N3054	16000	11300	—	—	125	27	10	—	30	HL-9b	5.000	—
1N3055	18000	12700	—	—	125	30	10	—	30	HL-9b	5.000	—
1N3056	20000	14150	—	—	125	34	10	—	30	HL-9c	6.000	—
1N3057	22000	15500	—	—	125	37	10	—	30	HL-9c	6.000	—
1N3058	24000	17000	—	—	125	40	10	—	30	HL-9d	7.000	—
1N3059	26000	18350	—	—	125	44	10	—	30	HL-9d	7.000	—
1N3060	28000	19750	—	—	125	47	10	—	30	HL-9e	8.000	—
1N3061	30000	21150	—	—	125	50	10	—	30	HL-9e	8.000	—

AMBIENT TEMPERATURE RANGE: -55°C to +150°C.

\* Types also available as JEDEC "A" versions.

☒ Check Factory

## high voltage cartridges

JEDEC Type No.	Peak Inverse Voltage (volts)	RMS Input Voltage (volts)	DC Output Current @ 50°C (mA)	Forward Voltage Drop (volts)	8 Millisecond Surge Current (Amps.)	Maximum Reverse Current @ 25°C @ PIV ( $\mu$ A)	Cartridge Length (Inches)
1N1133	1500	1050	500	2.5	30	10	2 1/2
1N1745							2 1/2
1N1134	1500	1050	500	2.5	30	10	1 3/4
1N1746							1 3/4
1N1135	1800	1260	500	2.5	30	10	2 1/2
1N1747							2 1/2
1N1136	1800	1260	500	2.5	30	10	1 3/4
1N1748							1 3/4
1N1137	2400	1680	400	2.5	30	10	2 1/2
1N1749							2 1/2
1N1138	2400	1680	400	2.5	30	10	1 3/4
1N1750							1 3/4
1N1139	3600	2520	250	5.0	30	10	4 3/4
1N1751							4 3/4

Notes: (1) Continuous DC rating same as PIV.  
(2) Resistive or inductive load.

## case outline drawings

**TO1**

**TO3**

**TO5**

**TO18**

**TO33**

**TO36**

**TO39**

**TO46**

**TO59**

**TO61**

**TO63**

**TO66**

**TO72**

**TO92**

**F8**

**Y220/TO220**

**NOTES:**

1. Refer to rules for dimensioning semiconductor product outlines included in Publication No. 76.
2. Figure "A", Axial Terminal Configuration, applicable.
3. Figure "B", Peripheral Terminal Configuration, applicable.
4. Alternate lead configurations allowed within C and D.
5. Tab contour optional within M and P.
6. Chamfer optional.
7. Position of lead to be measured .050 - .055 below seating plane.
8. Position of lead to be measured .250 - .325 from bottom of dimension E.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	NOTES
Y220A	.140	.045	.020	.012	.840	.340				.180	.040	.530	.040				.050	.340	.127	.100	.580	2
TO220AA	.180	.075	.045	.045	.885	.420				.210	.055	.570	.115									
Y220B	.140	.045	.020	.012	.840	.340	.090	.190			.020	.285	.040	.420	.180							
TO220AB	.180	.075	.045	.045	.885	.420	.110	.210			.025	.270	.117	.480	.180							3
TO220C																						

