SENSITRON SEMICONDUCTOR

Diodes Short Form Catalog

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For use in all Hi-Rel Applications
Space, Military, Medical, Aerospace

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153-0612

Zener Diodes

Sensitron's metallurgically bonded zener diode series are military qualified or pending qualification per MIL-PRF-19500/533, 435, and 356. These rectifiers are available in axial or MELF packaging, and in 500mW, 1.5W and 5W power.

Military qualified or pending qualification per MIL-PRF-19500/533

500mW Zener

Type	Nominal Zener Voltage	Zener Test Current	Max Zener Impedance	Max Current	Reverse Voltage	Max Reverse Current @ +25°C	Max Reverse Current @+150°C	Max Temp Coefficient
	V	mA	Ω	mA	V	µA	µA	%/°C
1N6319/US	6.2	20	3	68	3.5	5	10	+.060
1N6320/US	6.8	20	3	63	4.0	2	50	+.062
1N6324/US	10.0	20	6	43	8.0	1.00	10	+.079
1N6325/US	11.0	20	7	39	8.5	1.00	10	+.082
1N6326/US	12.0	20	7	35	9.0	1.00	10	+.083
1N6327/US	13.0	9.5	8	33	9.9	0.05	10	+.083
1N6328/US	15.0	8.5	10	28	11.0	0.05	10	+.084
1N6329/US	16.0	7.8	12	27	12.0	0.05	10	+.084
1N6330/US	18.0	7.0	14	24	14.0	0.05	10	+.085
1N6331/US	20.0	6.2	18	21	15.0	0.05	10	+.086
1N6332/US	22.0	5.6	20	19	17.0	0.05	10	+.087
1N6333/US	24.0	5.2	24	18	18.0	0.05	10	+.088
1N6334/US	27.0	4.6	27	16	21.0	0.05	10	+.090
1N6335/US	30.0	4.2	32	14	23.0	0.05	10	+.091
1N6336/US	33.0	3.8	40	13	25.0	0.05	10	+.092
1N6337/US	36.0	3.4	50	12.0	27.0	0.05	10	+.093
1N6338/US	39.0	3.2	55	11.0	30	0.05	10	+.094
1N6339/US	43.0	3.0	65	9.9	33	0.05	10	+.095
1N6340/US	47.0	2.7	75	9.0	36	0.05	10	+.095
1N6341/US	51.0	2.5	85	8.3	39	0.05	10	+.096
1N6342/US	56.0	2.2	100	7.6	43	0.05	10	+.097
1N6343/US	62.0	2.0	125	6.8	47	0.05	10	+.099
1N6344/US	68.0	1.8	155	6.3	52	0.05	10	+.101
1N6345/US	75.0	1.7	180	5.7	56	0.05	10	+.103
1N6346/US	82.0	1.5	220	5.2	62	0.05	10	+.105
1N6347/US	91.0	1.4	270	4.7	69	0.05	10	+.108
1N6348/US	100.0	1.3	340	4.3	76	0.05	10	+.110
1N6349/US	110.0	1.1	500	3.9	84	0.05	10	+.110
1N6350/US	120.0	1.0	600	3.5	91	0.05	10	+.110
1N6351/US	130.0	0.95	850	3.3	99	0.05	10	+.110

Zener Diodes

Type Number	Nominal Zener Voltage Vz @ I_{ZT} Volts	Zener Test Current Ir @ 150C µA	Max Zener Impedance Zzt ohms	Max Reverse Leakage Current Ir µA dc	Max Reverse Leakage Current Izsm mA	Max Zener Current Vr Volts
1N4099-1/ UR-1	6.8	250	200	1.0	56	5.20
1N4100-1/UR -1	7.5	250	200	1.0	51	5.70
1N4101-1/UR -1	8.2	250	200	0.5	46	6.24
1N4102-1/UR -1	8.7	250	200	0.5	44	6.61
1N4103-1/UR -1	9.1	250	200	0.5	42	6.92
1N4104-1/UR -1	10	250	200	0.5	38	7.60
1N4105-1/UR -1	11	250	200	0.05	35	8.44
1N4106-1/UR -1	12.0	250	200	0.05	540	9.2
1N4107-1/UR -1	13.0	250	200	0.05	500	9.9
1N4108-1/UR -1	14.0	250	200	0.05	464	10.7
1N4109-1/UR -1	15.0	250	100	0.05	433	11.4
1N4110-1/UR -1	16.0	250	100	0.05	406	12.2
1N4111-1/UR -1	17.0	250	100	0.05	382	13.0
1N4112-1/UR -1	18.0	250	100	0.05	361	13.7
1N4113-1/UR -1	19.0	250	150	0.05	342	14.5
1N4114-1/UR -1	20.0	250	150	0.01	325	15.2
1N4115-1/UR -1	22.0	250	150	0.01	295	16.8
1N4116-1/UR -1	24.0	250	150	0.01	271	18.3
1N4117-1/UR -1	25.0	250	150	0.01	260	19.0
1N4118-1/UR -1	27.0	250	150	0.01	240	20.5
1N4119-1/UR -1	28.0	250	200	0.01	232	21.3
1N4120-1/UR -1	30.0	250	200	0.01	216	22.8
1N4460/US	6.2	40.0	4	2.3	10	3.72
1N4461/US	6.8	37	2.5	2.1	5	4.08
1N4466/US	11.0	23.0	6	1.3	.30	8.80
1N4467/US	12.0	21.0	7	1.2	.20	9.60
1N4468/US	13.0	19.0	8	1.1	.05	10.40
1N4469/US	15.0	17.0	9	.95	.05	12.00
1N4470/US	16.0	15.5	10	.90	.05	12.80
1N4471/US	18.0	14.0	11	.79	.05	14.40
1N4472/US	20.0	12.5	12	.71	.05	16.00
1N4473/US	22.0	11.5	14	.65	.05	17.60
1N4474/US	24.0	10.5	16	.60	.05	19.20
1N4475/US	27.0	9.5	18	.53	.05	21.60
1N4476/US	30.0	8.5	20	.48	.05	24.00
1N4477/US	33.0	7.5	25	.43	.05	26.40
1N4478/US	36.0	7.0	27	.40	05	28.80
1N4479/US	39.0	6.5	30	.37	.05	31.20
1N4480/US	43.0	6.0	40	.33	.05	34.40
1N4481/US	47.0	5.5	50	.30	.05	37.60
1N4482/US	51.0	5.0	60	.28	.05	40.80
1N4483/US	56.0	4.5	70	.26	.25	44.80
1N4484/US	62.0	4.0	80	.23	.25	49.60
1N4485/US	68.0	3.7	100	.21	.25	54.40
1N4486/US	75.0	3.3	130	.19	.25	60.40
1N4487/US	82.0	3.0	160	.17	.25	65.60
1N4488/US	91.0	2.8	200	.16	.25	72.80
1N4489/US	100.0	2.5	250	.14	.25	80.00
1N4490/US	110.0	2.0	300	.13	.25	88.00
1N4491/US	120.0	2.0	400	.12	.25	96.00
1N4492/US	130.0	1.9	500	.11	.25	104.00
1N4493/US	150.0	1.7	700	.095	.25	120.00
1N4494/US	160.0	1.6	1000	.089	.25	125.00
1N4495/US	180.0	1.4	1300	.079	.25	144.00
1N4496/US	200.0	1.2	1500	.072	.25	160.00

Zener Voltage Regulator Diodes

Military qualified or pending qualification per MIL-PRF-19500/356

5 W Zener

SERIES TYPE	V_Z NOM	TEST CURRENT I_Z	MAX ZENER IMPEDANCE		VOLTAGE REG V_Z	SURGE CURRENT I_{ZSM}	MAX REVERSE LEAKAGE CURRENT@ V		TEMP. COEFF αV_Z	MAX CONT CURRENT I_{ZM}
			Z_Z	Z_{ZK}			V_R	I_{R1}		
5W	V	mA	Ω	Ω	V	A	V	µA	% /°C	mA
1N4958/US	10	125	2	125	.8	20	7..6	25	.07	475
1N4959/US	11	125	2.5	130	.8	19	8.4	10	.07	430
1N4960/US	12	100	2.5	140	.8	18	9.1	10	.07	395
1N4961/US	13	100	3	145	.9	16	9.9	10	.08	365
1N4962/US	15	75	3.5	150	1.0	12	11.4	5	.08	315
1N4963/US	16	75	3.5	155	1.1	10	12.2	5	.08	294
1N4964/US	18	65	4	160	1.2	9.0	13.7	5	.085	264
1N4965/US	20	65	4.5	165	1.5	8.0	15.2	2	.085	237
1N4966/US	22	50	5	170	1.8	7.0	16.7	2	.085	216
1N4967/US	24	50	5	175	2.0	6.5	18.2	2	.09	198
1N4968/US	27	50	6	180	2.0	6.0	20.6	2	.09	176
1N4969/US	30	40	8	190	2.5	5.5	22.8	2	.09	158
1N4970/US	33	40	10	200	2.8	5.0	25.1	2	.095	144
1N4971/US	36	30	11	220	3.0	4.5	27.4	2	.095	132
1N4972/US	39	30	14	230	3.0	4.0	29.7	2	.095	122
1N4973/US	43	30	20	240	3.3	3.5	32.7	2	.095	110
1N4974/US	47	25	25	250	3.5	3.2	35.8	2	.095	100
1N4975/US	51	25	27	270	4.0	3.0	38.8	2	.095	92
1N4976/US	56	20	35	320	4.4	2.8	42.6	2	.095	84
1N4977/US	62	20	42	400	5.0	2.5	47.1	2	.100	76
1N4978/US	68	20	50	500	5.5	2.2	51.7	2	.100	70
1N4979/US	75	20	55	620	6.0	2.0	56	2	.100	63
1N4980/US	82	15	80	720	6.6	1.8	62.2	2	.100	58.0
1N4981/US	91	15	90	760	7.5	1.6	69.2	2	.100	52.5
1N4982/US	100	12	110	800	8.0	1.4	76.0	2	.100	47.5
1N4983/US	110	12	125	1,000	9.0	1.2	83.6	2	.100	43.0
1N4984/US	120	10	170	1,150	10	1.0	91.2	2	.100	39.5
1N4985/US	130	10	190	1,250	11	.8	98.8	2	.105	36.6
1N4986/US	150	8	330	1,500	13	.75	114.0	2	.105	31.6
1N4987/US	160	8	350	1,650	14	.70	121.6	2	.105	29.4
1N4988/US	180	5	450	1,750	16	.60	136.8	2	.110	26.4
1N4989/US	200	5	500	1,850	18	.50	152.0	2	.110	23.6
1N4990/US	220	5	550	2,000	19	.50	167	2	.115	21.6
1N4991/US	240	5	650	2,050	22	.40	182	2	.115	19.8
1N4992/US	270	5	800	2,150	25	.35	206	2	.120	17.5
1N4993/US	300	4	950	2,200	28	.30	228	1	.120	15.6

Standard Recovery

This voidless hermetically sealed standard recovery rectifier diode series is military qualified or pending qualification per MIL-PRF-19500/228, 286, 427, and 420. These rectifiers are available in axial or MELF packaging, 1A or 3A, with a reverse recovery time greater than 500ns.

1A Standard Recovery (per MIL-PRF-19500/228, 286, 427)

TYPE NUMBER	PEAK INVERSE VOLTAGE	AVG RECTIFIED CURRENT Amps	MAXIMUM REVERSE CURRENT @ PIV µAmps		MAX. PEAK FORWARD VOLTAGE (PULSED) V_F @ 1A	MAXIMUM SURGE CURRENT I_{FSM}	MAXIMUM REVERSE RECOVERY TIME T_{rr}
	Volts	55°C	25°C	150°C	V	Amps	nsec
1N3611	200	1.0	1.0	300	1.1	30	5000
1N3612	400	1.0	1.0	300	1.1	30	5000
1N3613	600	1.0	1.0	300	1.1	30	5000
1N3614	800	1.0	1.0	300	1.1	30	5000
1N3957	1000	1.0	1.0	300	1.1	30	5000
1N4245	200	1.0	1.0	150	1.3	25	5000
1N4246	400	1.0	1.0	150	1.3	25	5000
1N4247	600	1.0	1.0	150	1.3	25	5000
1N4248	800	1.0	1.0	150	1.3	25	5000
1N4249	1000	1.0	1.0	150	1.3	25	5000
1N5614/US	200	1.0	.750	.5	25	1.3	30
1N5616/US	400	1.0	.750	.5	25	1.3	30
1N5618/US	600	1.0	.750	.5	25	1.3	30
1N5620/US	800	1.0	.750	.5	25	1.3	30
1N5622/US	1000	1.0	.750	.5	25	1.3	30

3A Standard Recovery (per MIL-PRF-19500/420)

TYPE NUMBER	PEAK INVERSE VOLTAGE	AVG RECTIFIED CURRENT Amps	MAXIMUM REVERSE CURRENT @ PIV µAmps		MAX. PEAK FORWARD VOLTAGE (PULSED) V_F @ 9A	MAXIMUM SURGE CURRENT I_{FSM}	MAXIMUM REVERSE RECOVERY TIME T_{rr}
	Volts	55°C	25°C	100°C	V	Amps	nsec
1N5550/US	200	3.0	1.0	60	1.2	100	2000
1N5551/US	400	3.0	1.0	60	1.2	100	2000
1N5552/US	600	3.0	1.0	60	1.2	100	2000
1N5553/US	800	3.0	1.0	60	1.3	100	2000
1N5554/US	1000	3.0	1.0	60	1.3	100	2000

Fast Recovery

This voidless hermetically sealed fast recovery rectifier diode series is military qualified and pending per MIL-PRF-19500/ 359, 424, 411, and 429 and available in 1A and 3A, up to 1000V.

1A Fast Recovery (per MIL-PRF-19500/359, 429)

TYPE NUMBER	PEAK INVERSE VOLTAGE	AVG. RECTIFIED CURRENT (Amps)		MAXIMUM REVERSE CURRENT @ PIV (µAmps)		MAX. FORWARD VOLTAGE		MAX SURGE CURRENT	MAXIMUM REVERSE RECOVERY TIME I_F=0.5A I_{RM}=1A $I_{R(REC(}$=0.25A	THERM RES R_{thJL} d=.375
	Volts	55°C	100°C	25°C	150°C	V	A	Amps	nsec	°C/W
1N4942	200	1.0	.75	1.0	200	1.3	1.0	15	150	38
1N4944	400	1.0	.75	1.0	200	1.3	1.0	15	150	38
1N4946	600	1.0	.75	1.0	200	1.3	1.0	⍰⍰	250	38
1N4947	800	1.0	.75	1.0	200	1.3	1.0	15	250	38
1N4948	1000	1.0	.75	1.0	200	1.3	1.0	15	500	38
1N5615/US	200	1.0	.75	0.5	25	1.6	3.0	25	150	38
1N5617/US	400	1.0	.75	0.5	25	1.6	3.0	25	150	38
1N5619/US	600	1.0	.75	0.5	25	1.6	3.0	25	250	38
1N5620/US	800	1.0	.75	0.5	25	1.6	3.0	25	300	38
1N5623/US	1000	1.0	.75	0.5	25	1.6	3.0	25	500	38

3A Fast Recovery (per MIL-PRF-19500/424, 411)

TYPE NUMBER	PEAK INVERSE VOLTAGE	AVG. RECTIFIED CURRENT (Amps)		MAXIMUM REVERSE CURRENT @ PIV (µAmps)		MAX. FORWARD VOLTAGE		MAX SURGE CURRENT	MAXIMUM REVERSE RECOVERY TIME I_F=0.5A I_{RM}=1A $I_{R(REC(}$=0.25A	THERM RES $R_{\theta JL}$
	Volts	55°C	150°C	25°C	100°C	V	A	Amps	nsec	°C/W
1N5186	100	3.0	0.78	2.0	100	1.5	9	80	150	d=.375
1N5187	200	3.0	0.78	2.0	100	1.5	9	80	200	20
1N5188	400	3.0	0.78	2.0	100	1.5	9	80	250	
1N5190	600	3.0	0.78	2.0	100	1.5	9	80	400	
1N5415/US	50	3.0	0.78	2.0	100	1.6	9	80	150	d=.375 22
1N5416/US	100	3.0	0.78	2.0	100	1.6	9	80	150	
1N5417/US	200	3.0	0.78	2.0	100	1.7	9	80	150	L=0
1N5418/US	400	3.0	0.78	2.0	100	1.7	9	80	150	6.5
1N5419/US	500	3.0	0.78	2.0	100	1.8	9	80	250	
1N5420/US	600	3.0	0.78	2.0	100	1.8	9	80	400	

Ultrafast

These Ultrafast Recovery Rectifier diode series is military qualified per MIL-PRF-19500/477, 585, and 590. These devices are hermetically sealed with voidless glass construction using an internal “Category 1” metallurgical bond, and available in both surface mount MELF (U, US suffix) and leaded package configurations. Applications include space, commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE	AVG RECTIFIED CURRENT	MAXIMUM REVERSE CURRENT @ PIV		MAX. FORWARD VOLTAGE (PULSED) V_F @ IF	MAXIMUM SURGE CURRENT @ T_A=25°C I_{FSM}	MAXIMUM REVERSE RECOVERY TIME T_{rr}
		Amps	µAmps				
	Volts	25°C	25°C	°C	V	Amps	nsec
1N5802/US	50	2.5	1.0	175 @ 125°C	.975	35	25
1N5804/US	100	2.5	1.0	175 @ 125°C	.975	35	25
1N5806/US	150	2.5	1.0	175 @ 125°C	.975	35	25
1N5807/US	50	2.5	1.0	175 @ 125°C	.975	35	25
1N5809/US	100	6.0	5.0	525@ 125°C	.875 @ 4A	125	30
1N5811/US	150	6.0	5.0	525@ 125°C	.875 @ 4A	125	30
1N6620 /U/ US	200	1.2	0.5	150@150°C	1.40@ 1.2A	20	30
1N6621 /U/ US	400	1.2	0.5	150@150°C	1.40@ 1.2A	20	30
1N6622 /U/ US	600	1.2	0.5	150@150°C	1.40@ 1.2A	20	30
1N6623 /U/ US	800	1.0	0.5	150@150°C	1.55@ 1.0A	20	50
1N6624 /U/ US	900	1.0	0.5	150@150°C	1.55@ 1.0A	20	50
1N6625 /U/ US	1000	1.0	1.0	200@150°C	1.75@ 1.0A	15	60
1N6626 /U/ US	200	2.3	2.0	500@150°C	1.35@ 2.0A	75	30
1N6627 /U/ US	400	2.3	2.0	500@150°C	1.35@ 2.0A	75	30
1N6628 /U/ US	600	2.3	2.0	500@150°C	1.35@ 2.0A	75	30
1N6629 /U/ US	800	1.8	2.0	500@150°C	1.40@ 1.4A	75	50
1N6630 /U/ US	900	1.8	2.0	500@150°C	1.40@ 1.4A	75	50
1N6631 /U/ US	1000	1.8	4.0	600@150°C	1.60@ 1.4A	60	60

TVS Diodes

This voidless hermetically sealed TVS diode series is military qualified or pending qualification per MIL-PRF-19500/500, 516, 420, and 411. These rectifiers are available in axial or MELF packaging, up to 1500W in Unidirectional or Bi-Directional configurations.

SERIES TYPE	MIN BREAKDOWN VOLTAGE V_{BR} @ I_{BR}		WORKING PEAK REVERSE VOLTAGE V_{RWM}	MAXIMUM STANDBY CURRENT I_D	MAX. CLAMP. VOLTAGE VC @ I_{Pp} tp = 1ms	MAX. PEAK PULSE CURRENT tp = 1ms, tr = 10µs I_{Pp}	MAX. TEMP. COEFFICIENT
1500W	Vdc	mA dc	Vdc	µAdc	V(pk)	A(pk)	% / °C
1N5629A	6.45	10	5.80	1000	10.5	143.0	.057
1N5630A	7.13	10	6.40	500	11.3	132.0	.061
1N5631A	7.79	10	7.02	200	12.1	124.0	.065
1N5632A	8.65	1	7.78	50	13.4	112.0	.068
1N5633A	9.50	1	8.55	10	14.5	103.5	.073
1N5634A	10.50	1	9.40	5	15.6	96.0	.075
1N5635A	11.40	1	10.20	5	16.7	90.0	.078
1N5636A	12.40	1	11.10	5	18.2	82.0	.081
1N5637A	14.30	1	12.80	5	21.2	71.0	.084
1N5638A	15.20	1	13.60	5	22.5	67.0	.086
1N5639A	17.10	1	15.30	5	25.2	59.5	.088
1N5640A	19.00	1	17.10	5	27.7	54.0	.090
1N5641A	20.90	1	18.80	5	30.6	49.0	.092
1N5642A	22.80	1	20.50	5	33.2	45.0	.094
1N5643A	25.70	1	23.10	5	37.5	40.0	.096
1N5644A	28.50	1	25.60	5	41.4	36.0	.097
1N5645A	31.40	1	28.20	5	45.7	33.0	.098
1N5555	33.00	1	30.50	5	47.5	32.0	.093
1N5646A	34.20	1	30.80	5	49.9	30.0	.099
1N5647A	37.10	1	33.30	5	53.9	28.0	.100
1N5648A	40.90	1	36.80	5	59.3	25.3	.101
1N5556	43.70	1	40.30	5	63.5	24.0	.094
1N5649A	44.70	1	40.20	5	64.8	23.2	.101
1N5650A	48.50	1	43.60	5	70.1	21.4	.102
1N5651A	53.20	1	47.80	5	77.0	19.5	.103
1N5557	54.00	1	49.00	5	78.5	19.0	.096
1N5652A	58.90	1	53.00	5	85.0	17.7	.104
1N5653A	64.60	1	58.10	5	92.0	16.3	.104
1N5654A	71.30	1	64.10	5	103.0	14.6	.105
1N5655A	77.90	1	70.10	5	113.0	13.3	.105
1N5656A	86.50	1	77.80	5	125.0	12.0	.106
1N5657A	95.00	1	85.50	5	137.0	11.0	.106
1N5658A	105.00	1	94.00	5	152.0	9.9	.107
1N5659A	114.00	1	102.00	5	165.0	9.1	.107
1N5660A	124.00	1	111.00	5	179.0	8.4	.107
1N5661A	143.00	1	128.00	5	207.0	7.2	.108
1N5662A	152.00	1	136.00	5	219.0	6.8	.108
1N5663A	162.00	1	145.00	5	234.0	6.4	.108
1N5664A	171.00	1	154.00	5	246.0	6.1	.108
1N5665A	190.00	1	171.00	5	274.0	5.5	.108

TVS Diodes

Bidirectional TVS (per MIL-PRF-19500/516)

SERIES TYPE		MIN BREAKDOWN VOLTAGE $V_{B)}$ @ I_{BR}		WORKING PEAK REVERSE VOLTAGE V_{RWM}	MAXIMUM REVERSE CURRENT I_{R1}	MAX. CLAMP. VOLTAGE VC @ I_P tp = 1ms	MAX. PEAK PULSE CURRENT I_P	MAX. TEMP. COEFFICIENT
500W	1500W	Vdc	mA dc	Vdc	µAdc	V(pk)	A(pk)	% / °C
1N6108A/US	*1N6144A/US*	11.40	100	9.1	20	16.9	88.8	.07
1N6109A/US	*1N6145A/US*	12.35	100	9.9	20	18.2	82.4	.08
1N6110A/US	*1N6146A/US*	14.25	75	11.4	20	21.0	71.4	.08
1N6111A/US	*1N6147A/US*	15.20	75	12.2	20	22.3	67.3	.08
1N6112A/US	*1N6148A/US*	17.10	65	13.7	10	25.1	59.8	.085
1N6113A/US	*1N6149A/US*	19.00	65	15.2	5.0	27.7	54.2	.085
1N6114A/US	*1N6150A/US*	20.9	50	16.7	5.0	30.5	49.2	.085
1N6115A/US	*1N6151A/US*	22.8	50	18.2	5.0	33.3	45.0	.09
1N6116A/US	*1N6152A/US*	25.7	50	20.6	5.0	37.4	40.1	.09
1N6117A/US	*1N6153A/US*	28.5	40	22.8	5.0	41.6	36.0	.09
1N6118A/US	*1N6154A/US*	31.4	40	25.1	5.0	45.7	32.8	.095
1N6119A/US	*1N6155A/US*	34.2	30	27.4	5.0	49.9	30.1	.095
1N6120A/US	*1N6156A/US*	37.1	30	29.7	5.0	53.6	28.0	.095
1N6121A/US	*1N6157A/US*	40.9	30	32.7	5.0	59.1	25.4	.095
1N6122A/US	*1N6158A/US*	44.7	25	35.8	5.0	64.6	23.2	.095
1N6123A/US	*1N6159A/US*	48.5	25	38.8	5.0	70.1	21.4	.095
1N6124A/US	*1N6160A/US*	53.2	20	42.6	5.0	77.0	19.5	.095
1N6125A/US	*1N6161A/US*	58.9	20	47.1	5.0	85.3	17.6	.100
1N6126A/US	*1N6162A/US*	64.6	20	51.7	5.0	97.1	15.4	.100
1N6127A/US	*1N6163A/US*	71.3	20	56.0	5.0	103.1	14.5	.100
1N6128A/US	*1N6164A/US*	77.9	15	62.2	5.0	112.8	13.3	.100
1N6129A/US	*1N6165A/US*	86.5	15	69.2	5.0	125.1	12.0	.100
1N6130A/US	*1N6166A/US*	95.0	12	76.0	5.0	137.6	10.9	.100
1N6131A/US	*1N6167A/US*	104.5	12	83.6	5.0	151.3	9.9	.100
1N6132A/US	*1N6168A/US*	114.0	10	91.2	5.0	165.1	9.1	.100
1N6133A/US	*1N6169A/US*	123.5	10	98.8	5.0	178.8	8.4	.105
1N6134A/US	*1N6170A/US*	142.5	8.0	114.0	5.0	206.3	7.3	.105
1N6135A/US	*1N6171A/US*	152	8.0	121.6	5.0	218.4	6.9	.105
1N6136A/US	*1N6172A/US*	171	5.0	136.8	5.0	245.7	6.1	.110
	1N6173A/US	190	5.0	152.0	5.0	273.0	5.5	.110

These voidless hermetically sealed diode series are military qualified or pending qualification per MIL-PRF-19500/241, 578, 609, and 586. These Vf Controlled, Switching, and Schottky diodes are available in axial or MELF packaging.

Vf Controlled Diodes

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE	PEAK FORWARD SURGE CURRENT @ 55°C I_{FSM}	AVERAGE RECTIFIED FORWARD CURRENT @ 75°C I_o	BREAKDOWN VOLTAGE V_{BR}	THERMAL RESISTANCE L=0 $R_{\theta JEC}$	THERMAL RESISTANCE L= .375 $R_{\theta JL}$
	Volts	mAmps	µAmps	V	°C/W	°C/W
1N3595-1 / 1N3595US	125	500	150	150	40	250

Switching Diodes

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE	PEAK FORWARD SURGE CURRENT @ 55°C I_{FSM}	AVERAGE RECTIFIED CURRENT FORWARD @ 75°C I_o	BREAKDOWN VOLTAGE V_{BR}	THERMAL RESISTANCE L=0 $R_{\theta JEC}$	THERMAL RESISTANCE L= .375 $R_{\theta JL}$
	Volts	Amps	µAmps	V	°C/W	°C/W
1N6638/U/US	125	2.5	300	150	150	40
1N6639/US	75	2.5	300	100	150	50
1N6640/US	50	2.5	300	75	150	50
1N6641/US	50	2.5	300	75	150	50
1N6642/U/US	75	2.5	300	100	150	40

Schottky Diodes

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE	PEAK FORWARD SURGE CURRENT @55°C I_{FSM}	AVERAGE RECTIFIED FORWARD CURRENT @75°C I_o	FORWARD VOLTAGE V_F	THERMAL RESISTANCE $R_{\theta JEC}$ L=0 $R_{\theta JEC}$	THERMAL RESISTANCE L= .3755 $R_{\theta JL}$
	Volts	mAmps	**µAmps**	V	°C/W	°C/W
1N5819/ UR-1	45	25	1.0	.49	70	40

Die Products

Rectifier, TVS, Zener, Schottky, Small Signal Switching

Standard Metalization:
Top: (Al, 25kÅ min) Bottom: (Ti/Ni/Ag, 30kÅ min)
Bottom side: cathode, Top side: anode

***** This list is for reference only. For a comprehensive list, view our catalog for download at: www.sensitron.com/dieproducts.htm***

Sensitron can perform Lot Acceptance Testing to the process flow following these quality levels:

- ✓ **MIL-PRF-38534, Class H and Class K**
- ✓ **MIL-PRF-19500, Class H and Class K**

General Purpose, Fast, Ultrafast Rectifier Die
- **Voltage: 50 to 6000V**
- **1A to 70A Chip**
- **Trr: 25ns to 3000ns**

TVS Die
- **Broad voltage range available**
- **Broad spectrum transient suppression**
- **500W, 1500W surge capability**

Zener Die
- **Working Voltage: 3.3V to 390V**
- **Power: 500mW – 5W**
- **5% tolerance for Vz**

Schottky Die
- **Soft reverse recovery at low and high temperature**
- **Broad voltage range: 15V-200V**
- **500W, 1500W surge capability**

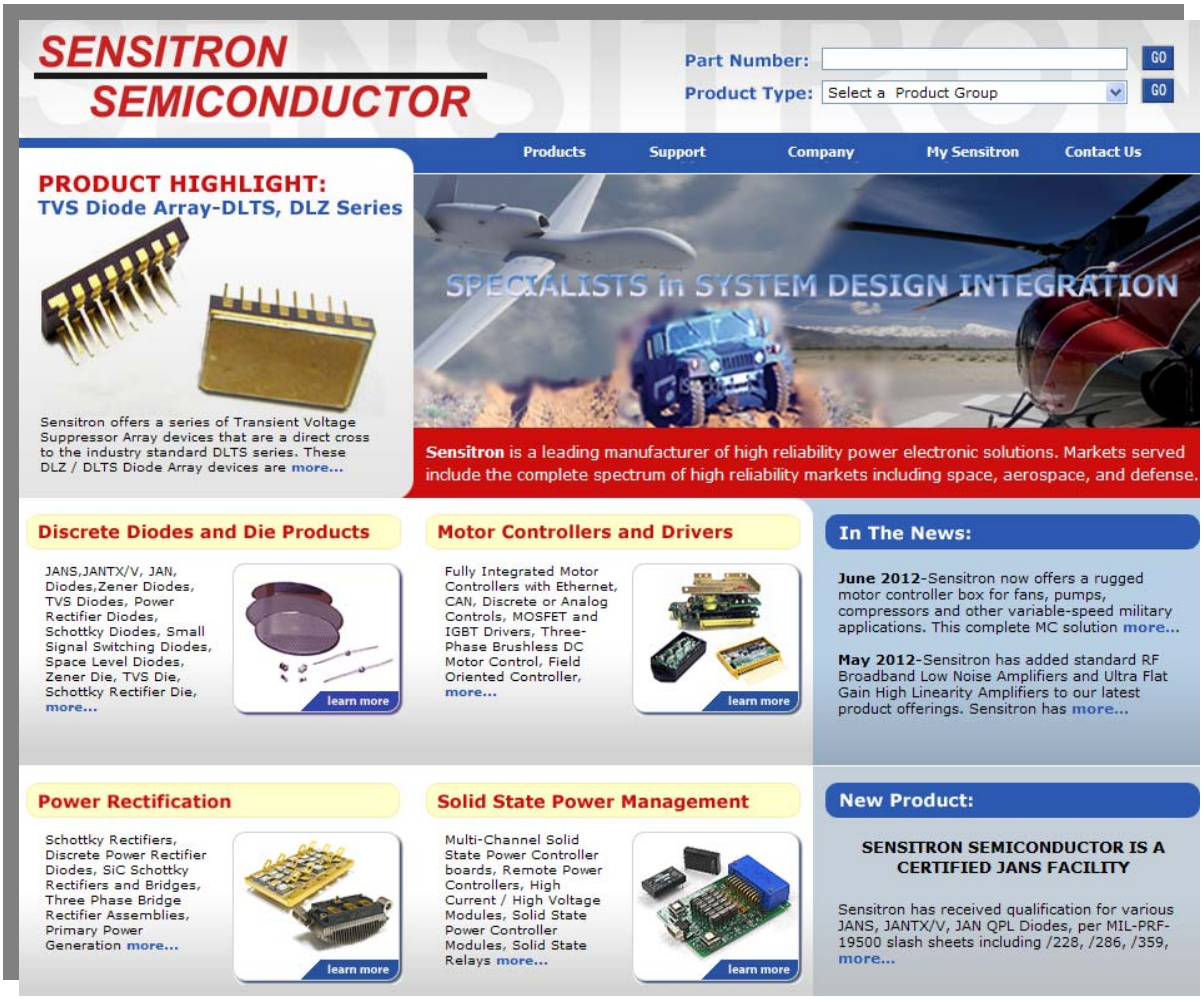
Small Signal Switching Die
- **Voltage: 70 to 150V**
- **Up to .3A**

Part Number						Slash	Description	Die
1C3595-1						241	*Vf Controlled*	✓
1C3611	1C3612	1C3613	1C3614	1C3957		228	*1A Std Recovery*	✓
1C4099-1	to	1C4135-1				435	*500mW Zener*	✓
1C4148-1						116	*Small Signal Switching*	✓
1C4245	1C4246	1C4247	1C4248	1C4249		286	*1A Std Recovery*	✓
1C4460	to	1C4496				406	*1.5W Zener*	✓
1C4942	1C4944	1C4946	1C4947	1C4948		359	*1A Fast Recovery*	✓
1C4954	to	1C4996				356	*5W Zener*	✓
1C5186	1C5187	1C5188	1C5190			424	*3A Fast Recovery*	✓
1C5415	1C5416	1C5417	1C5418	1C5419	1C5420	411	*3A Fast Recovery*	✓
1C5550	1C5551	1C5552	1C5553	1C5554		420	*3A Std Recovery*	✓
1C5614	1C5616	1C5618	1C5620	1C5622		427	*1A Std Recovery*	✓
1C5615	1C5617	1C5619	1C5621	1C5623		429	*1A Fast Recovery*	✓
1C5711-1						444	*Schottky*	✓
1C5802	1C5804	1C5806	1C5807	1C5809	1C5811	477	*3A Ultra Fast*	✓
1C5819-1						586	*1A/45V Schottky*	✓
1C6309	to	1C6355				533	*500mW Zener*	✓
1C6620	1C6621	1C6622	1C6623	1C6624	1C6625	585	*1A Ultra Fast Rectifier HV*	✓
1C6626	1C6627	1C6628	1C6629	1C6630	1C6631	590	*2A Ultra Fast Rectifier HV*	✓
1C6638	1C6642					578	*Small Signal Switching*	✓
1C6639	1C6640	1C6641				609	*Small Signal Switching*	✓

JANS Certified Diode Line
MIL-PRF-19500 for JAN, JANTX, JANTXV
MIL-PRF-38534
ISO 9001:2008 Edition
AS9100C:2009

JAN QPL & EQUIVALENT DIODES

- ✓ ***JAN, JANTX, JANTXV & JANS QPL certified diodes and space level equivalent diodes available***
- ✓ ***Parts available in axial or MELF packaging***
- ✓ ***In-house inventory to accommodate short lead times***
- ✓ ***Space equivalent devices are manufactured on the space qualified manufacturing line***



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