SENSITRON
SEMICONDUCTOR

1N6463 to 1N6468
1N6463U to 1N64684U

TECHNICAL DATA
DATA SHEET 4240, Rev-

UNIDIRECTIONAL TVS 500W DIODE

SENSITRON`s Power Semiconductor Products have been used in space, Military and high-rel applications for more than 30 years. Our 500W unidirectional TVS diodes include 1N6463 to 1N6468 in axial and melf packaging. We also supply 500W TVS unidirectional die products.

Applications / Markets:

▼ESD Protection
▼Inductive Switching Protection
▼Lighting Protection
▼Power supplies
▼Communications
▼Space/satellite
▼High-Rel Industrial
▼Military
▼Aerospace

Features / Benefits

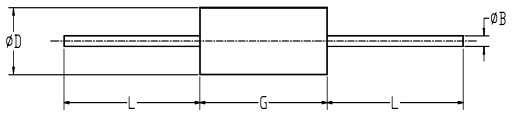
▼500W peak pulse power
▼Typical Ir less than 1uA
▼Breakdown voltage from 13V to 54V
▼Excellent clamping capability
▼Fast response time
▼Hermetic, non-cavity glass packaging
▼Metallurgically bonded
▼Screening to TX/TXV/S level
▼Tape and reel available

Electrical characteristics –

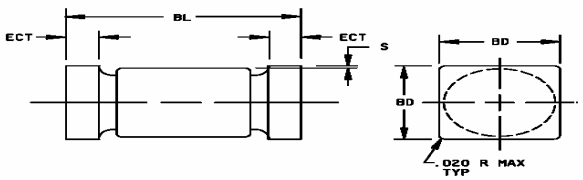
Temperature 25°C unless otherwise noted

Part#	V_{BR} @I_{BR}	I_{BR}	V_{RWM}	I_D at V_{RWM}	Vc at Ipp for Tp=1ms	Ipp		αV_{BR}	V_{BR2} miniumum at IBR TA=-55oC	I_{RM} Maximum Dc current	-Vc at tp=1 ms A(pk)= IAW inverse polarity
						tp=20us tr=8us	tp=1ms tr=10us				
	Vdc	mA dc	V(pk)	uAdc	V (pk)	A(pk)	A(pk)	%/°C	V dc	mA	V(pk)
1N6463	13.6	5	12	500	22.6	125	22	+0.085	13.0	139	-3.8
1N6464	16.4	5	15	500	26.5	107	19	+0.085	15.6	63	-3.8
1N6465	27.0	2	24	50	41.4	69	12	+0.096	25.1	39	-3.6
1N6466	33.0	1	30.5	3	47.5	63	11	+0.098	30.2	34	-3.6
1N6467	43.7	1	40.3	2	63.5	45	8	+0.101	40.0	46	-3.5
1N6468	54.0	1	51.6	2	78.5	35	6	+0.103	48.5	20	-3.4

Axial



Melf



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SENSITRON

TECHNICAL DATA
DATA SHEET 4240, Rev-

1N6463 thru 1N6468

PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	ϕB	ϕD	G	L
	.037/.042 0.94/1.07	.115/.145 2.92/3.68	.150/.300 3.81/7.62	.90/1.30 22.86/33.02

1N6463U thru 1N6468U

PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	BL	BD	S	ECT
	.200/.225 5.08/5.72	.137/.148 3.48/3.76	0.003 Min 0.008min	.019/.028 0.48/0.71

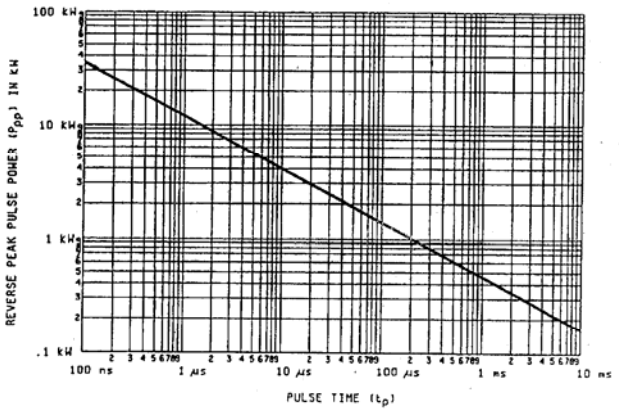

FIGURE 1
PEAK PULSE POWER vs. PULSE TIME

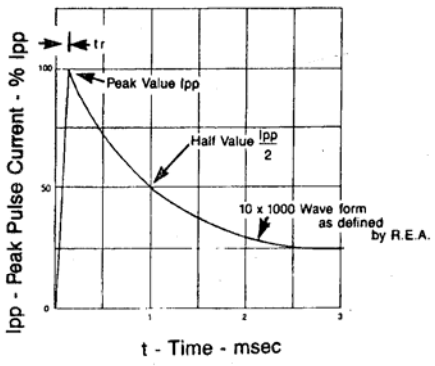

FIGURE 2
10/1000 µs CURRENT IMPULSE WAVEFORM

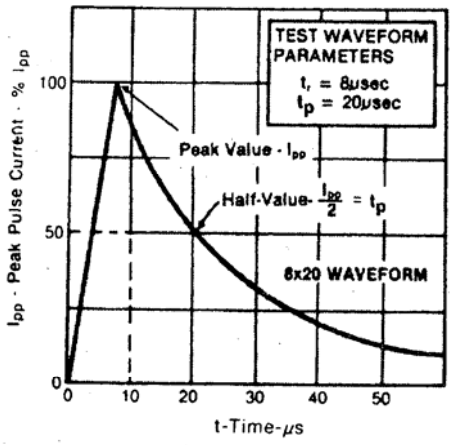

FIGURE 3
8/20 µs CURRENT IMPULSE WAVEFORM
(per MIL-PRF-19500/551

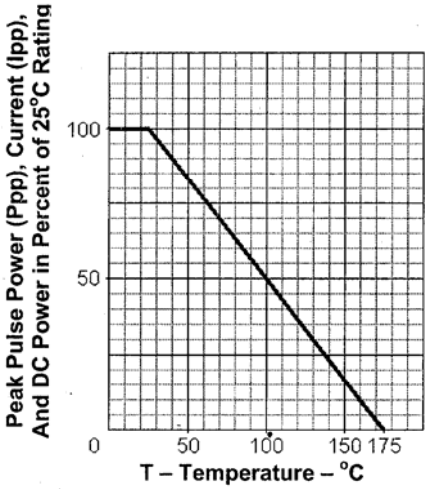

FIGURE 4
DERATING CURVE

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