

1500W Transient Voltage Suppressor

Features

- Glass passivated junction
- 1500W Peak Pulse Power capability with a 10/1000 μ s waveform
- Very Low clamping voltage
- Stand-off Voltage Range 5V to 45V
- Unidirectional and Bidirectional
- 100% surge tested
- Fast response time: 1×10^{-12} seconds (theoretical)
- High temperature soldering guaranteed 260°C/10 seconds (1.59mm from case)
- RoHS Compliant and Halogen Free



1.5KE



**HALOGEN
FREE**

Mechanical Data

Case:	Molded plastic over glass passivated junction, 1.5KE
Terminals:	Plated Axial leads, solderable per MIL-STD-202, Method 208
Polarity:	Cathode indicated by color band except Bidirectional
Mounting position:	Any
Weight:	0.045 ounce, 1.2 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
PPM	Peak Pulse Power Dissipation	1500	W	10/1000 μ s waveform
PM(AV)	Steady State Power Dissipation	5	W	-
IPPM	Peak Pulse current	See next table	A	10/1000 μ s waveform
IFSM	Peak Forward Surge Current	200	A	8.3ms Single Half Sine-wave, Unidirectional only
VF	Maximum Instantaneous Forward Voltage	3.5	V	IF=50A, 300 μ s Square pulse wave, Unidirectional only
TJ, TSTG	Operating Junction and Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$	-

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ICTE-5 - ICTE-45C

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

JEDEC P/N	General P/N	Reverse Stand-Off Voltage	Breakdown Voltage @ Test Current		Max. Reverse Leakage Current @ V_{WM}	Max. Clamping Voltage @ $I_{PP1}=1\text{A}$	Max. Clamping Voltage @ $I_{PP2}=10\text{A}$	Max. Peak Pulse Current
		V_{WM} (V)	V_{BR} Min.	I_T (mA)	I_R (μA)	V_C (V)	V_C (V)	I_{PPM} (A)
1N6373	ICTE-5	5	6.00	1	300	7.1	7.5	160
1N6374	ICTE-8	8	9.40	1	25	11.3	11.5	100
1N6375	ICTE-10	10	11.70	1	2.0	13.7	14.1	90
1N6376	ICTE-12	12	14.10	1	2.0	16.1	16.5	70
1N6377	ICTE-15	15	17.60	1	2.0	20.1	20.6	60
1N6378	ICTE-18	18	21.20	1	2.0	24.2	25.2	50
1N6379	ICTE-22	22	25.90	1	2.0	29.8	32.0	40
1N6380	ICTE-36	36	42.40	1	2.0	50.6	54.3	23
1N6381	ICTE-45	45	52.90	1	2.0	63.3	70.0	19
1N6382	ICTE-8C	8	9.40	1	50	11.4	11.6	100.0
1N6383	ICTE-10C	10	11.70	1	2.0	14.1	14.5	90.0
1N6384	ICTE-12C	12	14.10	1	2.0	16.7	17.1	70.0
1N6385	ICTE-15C	15	17.60	1	2.0	20.8	21.4	60.0
1N6386	ICTE-18C	18	21.20	1	2.0	24.8	25.5	50.0
1N6387	ICTE-22C	22	25.90	1	2.0	30.8	32.0	40.0
1N6388	ICTE-36C	36	42.40	1	2.0	50.6	54.3	23.0
1N6389	ICTE-45C	45	52.90	1	2.0	63.3	70.0	19.0

Note: 1. ICTE-5 and 1N6373 are not available in Bidirectional.
2. Suffix "C" indicates Bidirectional device.

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Typical Characteristics Curves

Fig.1- Peak Pulse Power Rating Curve

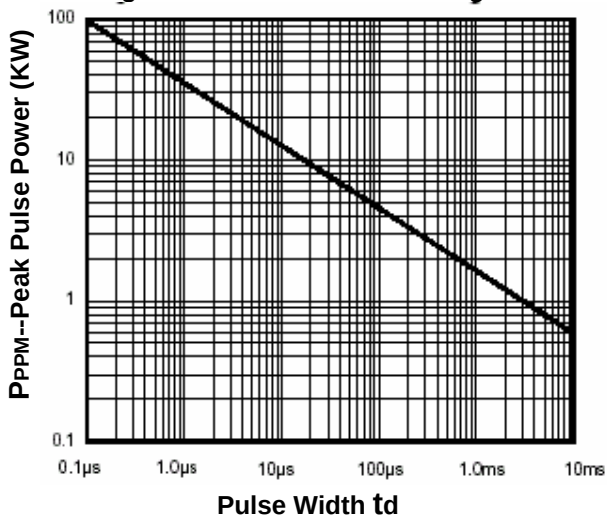


Fig.2- Typical Junction Capacitance

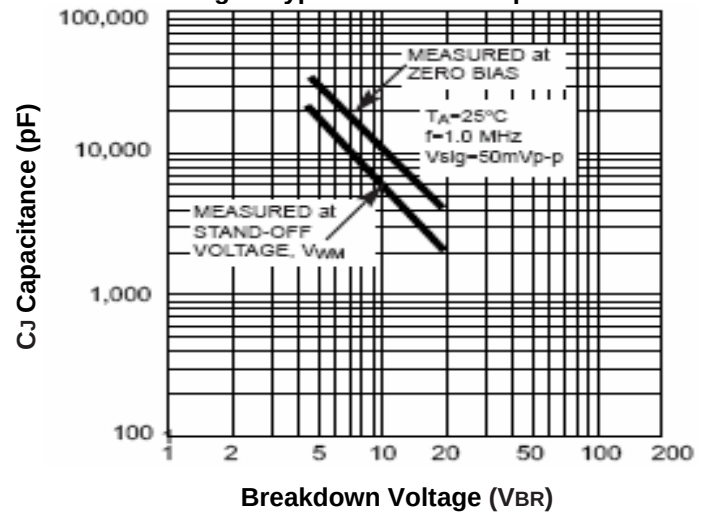
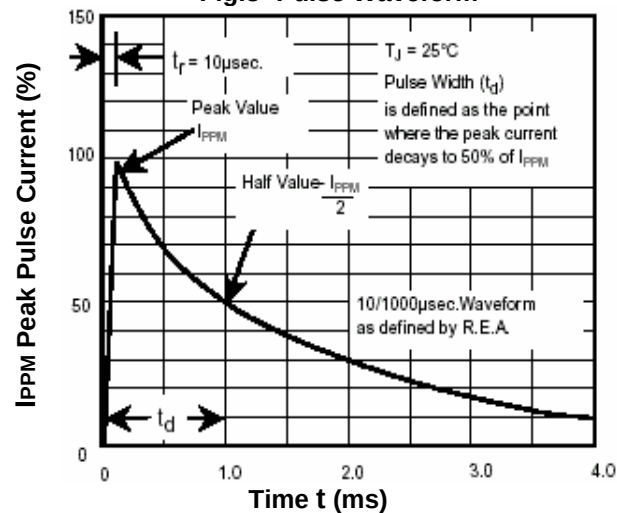


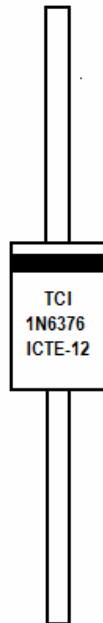
Fig.3- Pulse Waveform



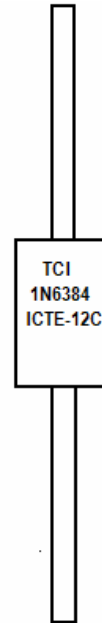
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Marking Information:

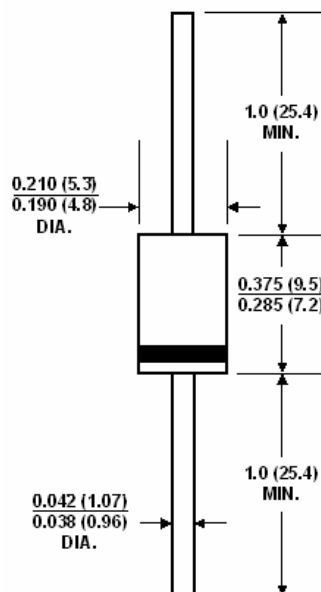


Unidirectional Marking



Bidirectional Marking

Dimensions: Inch (mm)



1.5KE

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