

ICT-5 - ICT-45C series

ICT SERIES (1500 WATT) METAL AXIAL TRANSIENT VOLTAGE SUPPRESSORS (hermetically sealed package)

The ICT series 1500 W transient suppressors are designed specifically for the protection of CMOS, NMOS, BiMOS, and other integrated circuits available today for TTL, DTL, ECL, RTL, and linear functions. This series offers the lowest clamping voltages.

FEATURES

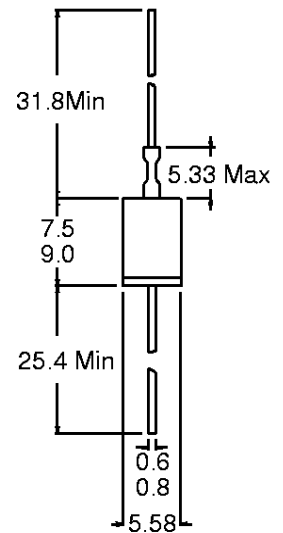
- ✧ Stand-off voltage range 5.0 - 45 Volts
- ✧ Glass Passivated Junction
- ✧ Excellent clamping capability
- ✧ Low zener impedance
- ✧ 100% Surge tested
- ✧ -65°C to + 175°C
- ✧ Hermetically sealed
- ✧ Uni & Bi directional

MAXIMUM RATING

- ✧ Peak Pulse Power (Ppk): 1500 Watts (10 X 1000µs) (see diagram on page 6 for wave form)
- ✧ 1 Watt Steady State
- ✧ Response time: 1 X 10⁻¹² seconds (theoretical)
- ✧ Operating & storage temperature: -55°C to + 175°C

MECHANICAL CHARACTERISTICS

- ✧ CASE: Metal hermetically sealed DO-13 package
- ✧ Terminals: Axial leads, solderable per MIL-STD-202 Method 208
- ✧ Polarity: Cathode indicated by colour band
- ✧ Weight: 1.5 grammes (approx)



All dimensions in mm

ELECTRICAL CHARACTERISTICS @ 25°C

PART NUMBER	REVERSE STANDOFF VOLTAGE V _R (Volts)	MINIMUM BREAKDOWN VOLTAGE V _{BR} @ 1 mA (Volts)	MAXIMUM REVERSE LEAKAGE I _R @ V _R (µA)	MAXIMUM CLAMPING VOLTAGE @ I _{PP1} =1A (Volts)	MAXIMUM CLAMPING VOLTAGE @ I _{PP2} =10A (Volts)	MAXIMUM PEAK PULSE CURRENT I _{PP} (A)
ICT-5 *	5.0 *	6.0	300.0	7.1	7.5	160
ICT-8	8.0	9.4	25.0	11.3	11.5	100
ICT-10	10.0	11.7	2.0	13.7	14.1	90
ICT-12	12.0	14.1	2.0	16.1	16.5	70
ICT-15	15.0	17.6	2.0	20.1	20.6	60
ICT-18	18.0	21.2	2.0	24.2	25.2	50
ICT-22	22.0	25.9	2.0	29.8	32.0	40
ICT-36	36.0	42.4	2.0	50.6	54.3	23
ICT-45	45.0	52.9	2.0	63.3	70.0	19

V_F max = 3.5 Volts at I_F = 50A 300 µS square wave pulse

ICT-8C	8.0	9.4	50.0	11.4	11.6	100
ICT-10C	10.0	11.7	2.0	14.1	14.5	90
ICT-12C	12.0	14.1	2.0	16.7	17.1	70
ICT-15C	15.0	17.6	2.0	20.8	21.4	60
ICT-18C	18.0	21.2	2.0	24.8	25.5	50
ICT-22C	22.0	25.9	2.0	30.8	32.0	40
ICT-36C	36.0	42.4	2.0	50.6	54.3	23
ICT-45C	45.0	52.9	2.0	63.3	70.0	19

*ICT-5 is not available in Bi-directional. Suffix 'C' denotes Bi-directional device.

ORDERING INFORMATION

ICT

Voltage
 Bi Directional Device
 Packaging Option
 B = Bulk (500 pcs)
 T = Tape & Reeled (1000 pcs)



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Figure 1 - Peak Pulse Power Rating Curve

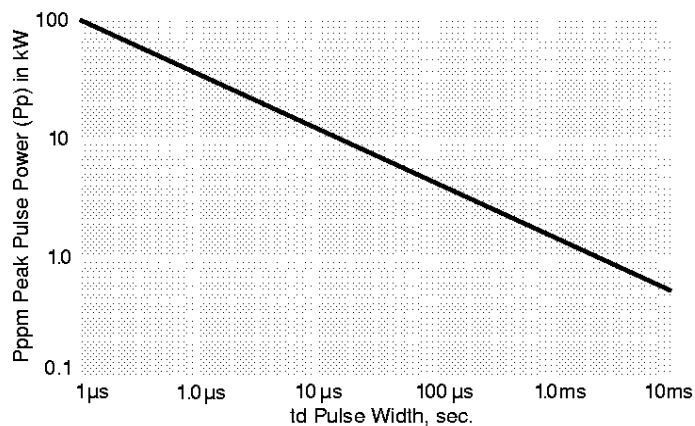


Figure 2 - Typical Junction Capacitance

