

1.5 KW (DO 13) TRANSIENT SUPPRESSORS

ELECTRICAL CHARACTERISTICS at 25°C

SICT, SIMPT & IN6356 - IN6372 SERIES (5.0 TO 45 VOLTS)

FEATURES:

- Metal Case
- Epitaxial Junction
- Low Leakage
- Low $\Delta V_z / \Delta I_z$ Characteristics
- T_{clamp} (0V to BV min.) $< 1 \times 10^{-12}$ sec
- Bi Polar $< 5 \times 10^{-9}$ sec

DESCRIPTION

... a high quality hermetically sealed suppressor for use in military and commercial applications when large voltage transients can permanently damage voltage sensitive components. This series has been designed to cover the most common operating voltage levels of a wide range of micro-processors, memories, digital and linear IC's.

MAXIMUM RATINGS:

Peak Pulse Power Dissipation ($T_A = 25^\circ\text{C}$)

Peak Forward Surge Current ($T_A = 25^\circ\text{C}$, 8.3 msec)(All Types)

Maximum Forward Voltage Drop (100A peak, 8.3 msec. sine wave)

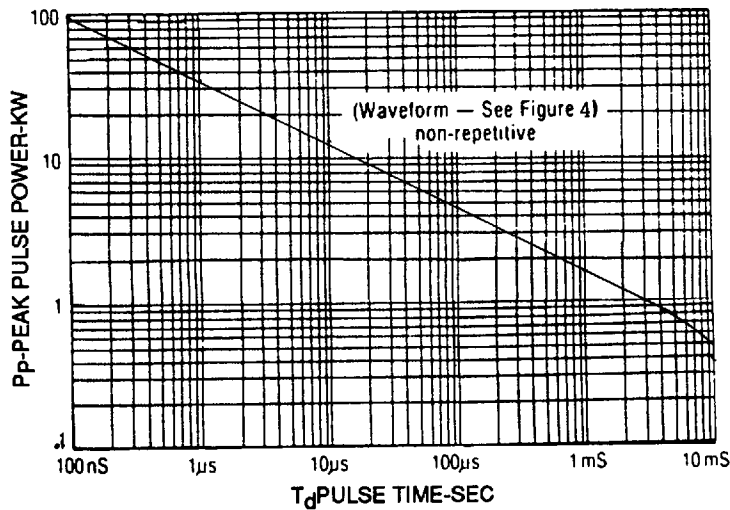
D.C. Power Dissipation ($T_A = 25^\circ\text{C}$)

D.C. Power Dissipation ($T_L = 75^\circ\text{C}$, @ 3/8" From Body)

Operating and Storage

P_p	1500 Watts
I_{FM}	200 Amps
V_F	3.5 Volts
P_M	1 Watt
P_M	1 Watt
T_{opr} T_{stg}	-65°C to +175°C

FIG 1



PEAK PULSE POWER VS PULSE TIME

FIG 3

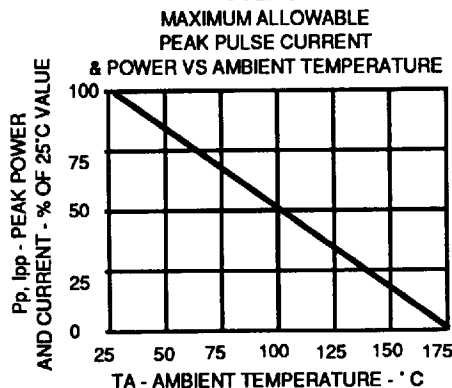


FIG 2

TEMPERATURE RATING CURVE

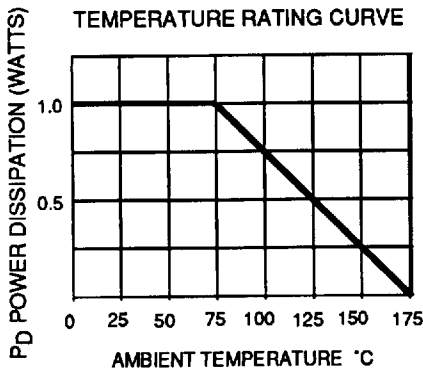
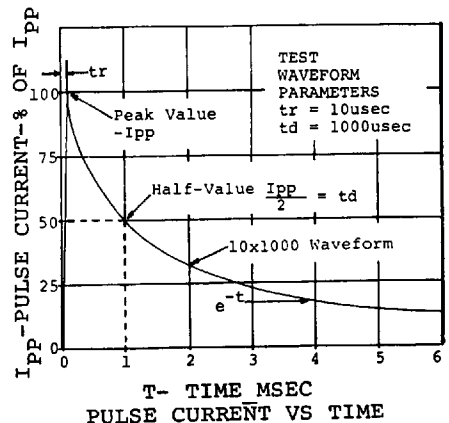


FIG 4



1.5 KW (DO 13) TRANSIENT SUPPRESSORS

ELECTRICAL CHARACTERISTICS at 25°C

SEMICON PART NUMBER	SEMICON PART NUMBER	JEDEC PART NUMBER	STAND-OFF VOLTAGE (Note 1) V_R VOLTS	MAXIMUM REVERSE LEAKAGE @ V_R I_R μA	MINIMUM BREAKDOWN VOLTAGE @ 1mA BV (min) VOLTS	MAXIMUM CLAMPING VOLTAGE @ $I_{pp}=1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE @ $I_{pp}=10A$ V_C VOLTS	MAXIMUM PEAK PULSE CURRENT I_{pp} A
SICT-5	SMPT-5	1N6356	5.0	300	6.0	7.1	7.5	160
SICT-8	SMPT-8	1N6357	8.0	25	9.4	11.3	11.5	100
SICT-10	SMPT-10	1N6358	10.0	2	11.7	13.7	14.1	90
SICT-12	SMPT-12	1N6359	12.0	2	14.1	16.1	16.5	70
SICT-15	SMPT-15	1N6360	15.0	2	17.6	20.1	20.6	60
SICT-18	SMPT-18	1N6361	18.0	2	21.2	24.2	25.2	50
SICT-22	SMPT-22	1N6362	22.0	2	25.9	29.8	32.0	40
SICT-36	SMPT-36	1N6363	36.0	2	42.4	50.6	54.3	23
SICT-45	SMPT-45	1N6364	45.0	2	52.9	63.3	70.0	19

ELECTRICAL CHARACTERISTICS at 25°C (BI-Polar)

SICT-8C	SMPT-8C	1N6365	8.0	25	9.4	11.4	11.6	100
SICT-10C	SMPT-10C	1N6366	10.0	2	11.7	14.1	14.5	90
SICT-12C	SMPT-12C	1N6367	12.0	2	14.1	16.7	17.1	70
SICT-15C	SMPT-15C	1N6368	15.0	2	17.6	20.8	21.4	60
SICT-18C	SMPT-18C	1N6369	18.0	2	21.2	24.8	25.5	50
SICT-22C	SMPT-22C	1N6370	22.0	2	25.9	30.8	32.0	40
SICT-36C	SMPT-36C	1N6371	36.0	2	42.4	50.6	54.1	23
SICT-45C	SMPT-45C	1N6372	45.0	2	52.9	63.3	70.0	19

NOTE 1: A suppressor is normally selected according to the reverse "Stand Off Voltage" (V_R) which should be equal to or greater than the DC or continuous peak operating voltage level.