

SHIPBOARD/AC POWER BUS VOLTAGE SUPPRESSOR
APPLICATIONS

- AC Power Protection
- Shipboard (Line-Line) Protection
- Differential AC Power Bus
- Aircraft AC Power Bus

FEATURES

- 60,000 & 90,000 Watts Peak Pulse Power Dissipation (1.2/50 μ s)
- 200 Volts Bidirectional
- Military Processing Available per MIL-PRF-19500
- Exceeds DOD-STD-1399 & MIL-STD-704A Requirements
- Each Device 100% Tested
- Hermetically Sealed Sub-Assemblies
- UL 94V-0 Flammability Classification

DESCRIPTION

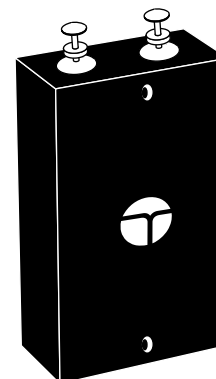
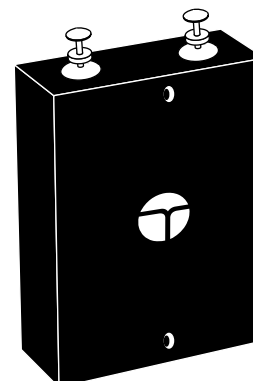
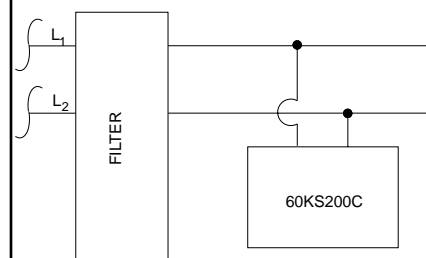
This series of devices were designed in accordance with DOD-STD-1399, section 300 (formally MIL-STD-1399) interface standard and MIL-STD-704A for shipboard systems, electrical power and alternating current. When large voltage transients endanger voltage sensitive components, the 60KS200C and 90KS200C has proven reliable for protection against power interruptions and shore power switch-over.

These silicon transient voltage suppressors (TVS) meet all applicable environmental requirements of MIL-STD-2036 (formally MIL-E-16400). The individual sub-modules can be selected for higher voltage applications as well as increased power capability. The 60KS and 90KS series can be screened upon request for military requirements in accordance with MIL-PRF-19500. Standard screening consists of 100% JANTX equivalent level testing per MIL-PRF-19500/507.

For ordering these options, use the following suffix:

- H1 - Submodule Screening
- H2 - Submodule and Module Screening
- H3 - Submodule and Module Screening
Module Group B & C Lot Testing

MAXIMUM RATINGS	
P_{PP} @ 25°C (See Figure 1)	60,000 & 90,000 Watts 1.2/50 μ s Waveshape
Steady State Power Dissipation	10.0 Watts T _A = 25°C
Operating & Storage Temperature	-65° to +150°C
t_{Clamping} (0 Volts to V_(BR) Min.)	Bidirectional: < 10 x 10 ⁻⁹ seconds
MECHANICAL CHARACTERISTICS	
Package	Molded Case, Glass-to-Metal Sub-Assemblies
Approximate Weight	50 grams
Device Markings	Logo, Date Code & Part Number
Miscellaneous	Sub-Assemblies Hermetically Sealed

60,000 WATTS

60KS200C
90,000 WATTS

90KS200C
AC POWER APPLICATION


ELECTRICAL CHARACTERISTICS @ 25° C Ambient Temperature

PROTEK PART NUMBER	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_{PPSM} = 180$ V_C VOLTS	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	MAXIMUM PEAK PULSE CURRENT (See Fig. 2) @ I_{PP} AMPS
60KS200C	180	200	335	10	180
90KS200C	180	200	280	0.5	180

FIGURE 1
PEAK PULSE POWER VS. PULSE TIME

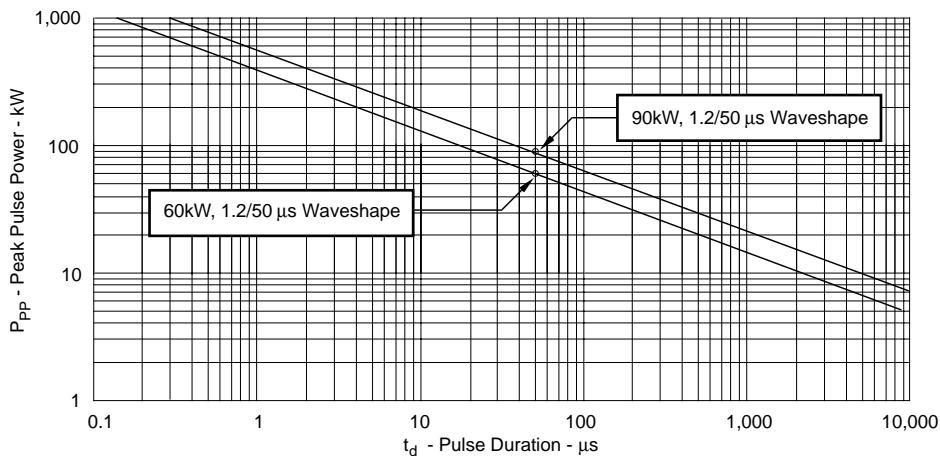


FIGURE 2
PULSE WAVE FORM

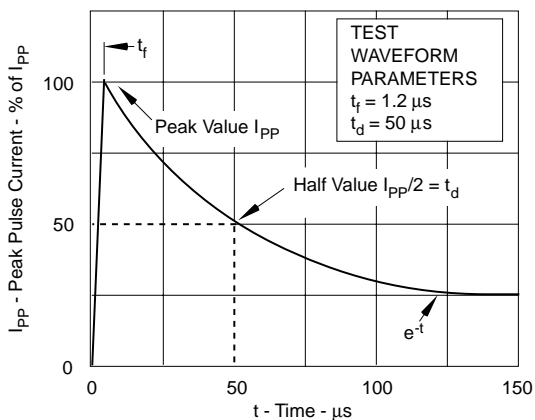
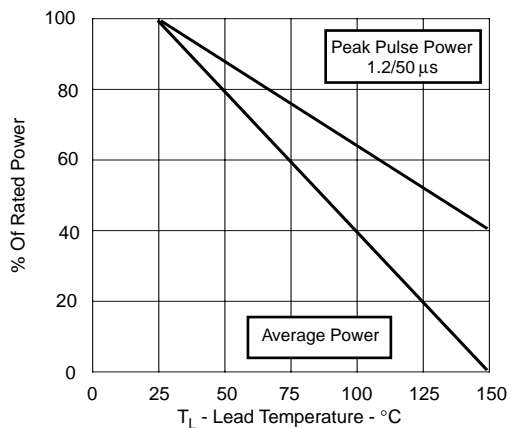
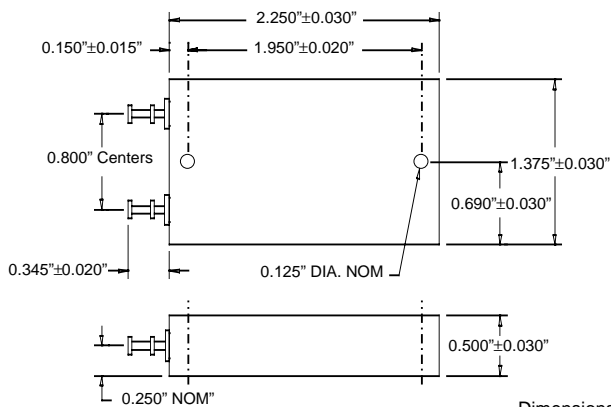


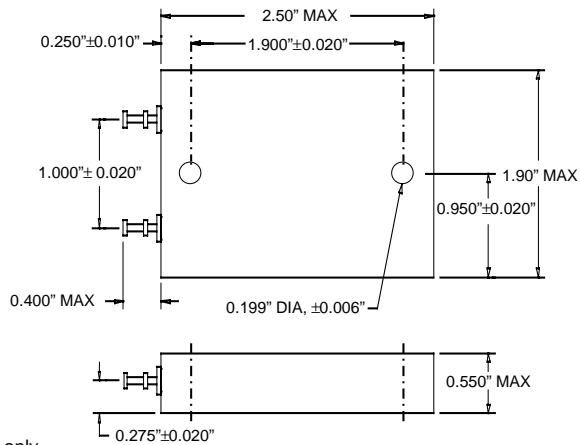
FIGURE 3
POWER DERATING CURVE



60KS DIMENSIONS



90KS DIMENSIONS



Dimensions shown in inches only.

