

**Microsemi Corp.**

The diode experts

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**704-15K36  
and  
704-15K36T  
TRANSIENT  
VOLTAGE  
SUPPRESSOR**



**FEATURES**

- DESIGNED FOR MIL-STD-704
- 28 VOLT POWER SUPPLY PROTECTION
- CAN BE SUPPLIED WITH JAN/JANTX PARTS

This series is primarily for use in avionics equipment. It meets all applicable environmental requirements of MIL-S-19500. The controlling specification for these devices is MIL-STD-704 (Characteristics and Utilization of Aircraft Electric Power). These 15kW assemblies are designed typically to operate with a minimum source impedance of .25 Ohms for transients.

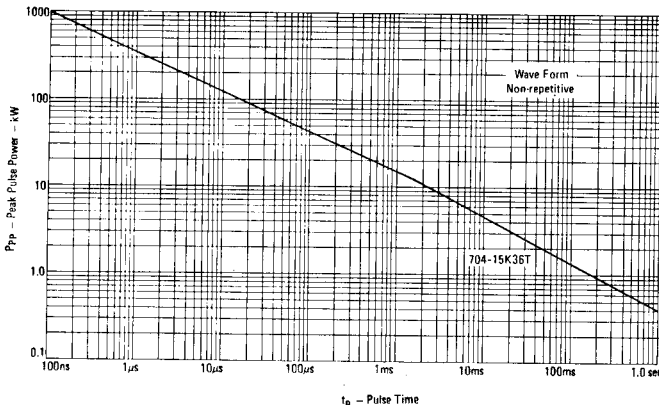
**MAXIMUM RATINGS**

Peak Pulse Power dissipation at 25°C: 15,000 watts at 1 ms (See Fig. 2)  
Steady State power dissipation: 10 watts  
 $t_{clamping}$  (0 volts to  $V_{(BR)}$  min): Less than  $1 \times 10^{-12}$  seconds  
Operating and Storage temperatures: -65° to +150°C  
Forward surge rating: 300 amps, 1/120 second at 25°C  
Duty cycle: .01%

**ELECTRICAL CHARACTERISTICS @ 25°C**

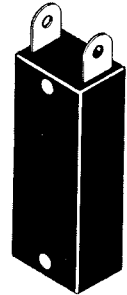
MICROSEMI PART NUMBER	REVERSE STAND-OFF VOLTAGE (Note 1) $V_{WM}$ VOLTS	MAXIMUM REVERSE LEAKAGE @ $V_{WM}$ $I_D$ $\mu A$	MINIMUM BREAKDOWN VOLTAGE @ 10 mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE @ $I_{pp}$ $V_C$ VOLTS	MAXIMUM PEAK PULSE CURRENT (Fig. 2) $I_{pp}$ A	MAXIMUM FORWARD VOLTAGE $V_F$ @ ~ 8.3 msec. 100 A VOLTS DC
704-15K36	31.5	100	36	51	300	3.0
704-15K36T	31.5	500	36	51	300	3.0

**NOTE 1:** TAZ are normally selected according to the reverse "Stand Off Voltage" ( $V_{WM}$ ) which should be equal to or greater than the dc or continuous peak operating voltage level. Bipolar also available. Consult factory.

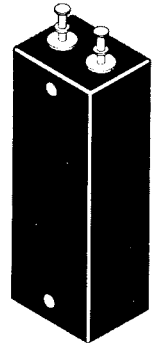


**FIGURE 1**  
PEAK PULSE POWER  
VS. PULSE TIME

**TRANSIENT  
ABSORPTION ZENER**



(Flat Terminal)



(Turret Terminal)

**MECHANICAL CHARACTERISTICS**

- CASE: Molded case.
- TERMINAL: Silver Plated Brass
- POLARITY: Cathode terminal marked with a dot.
- WEIGHT: 704-15K36 = 38 grams  
704-15K36T = 65 grams
- MOUNTING POSITION: Any.

# 704-15K36 and 704-15K36T

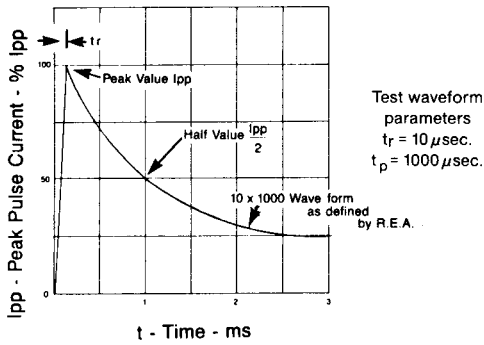
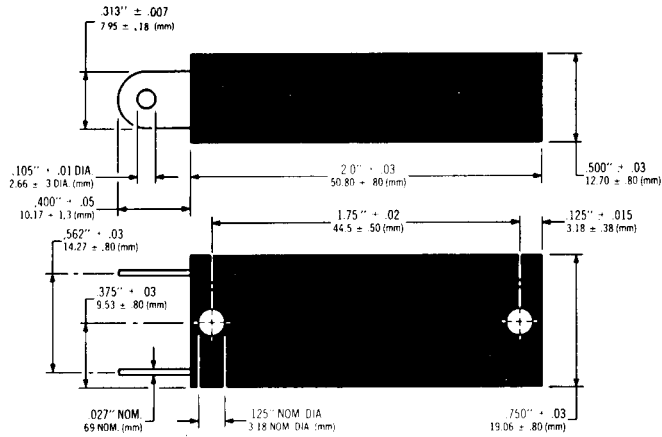


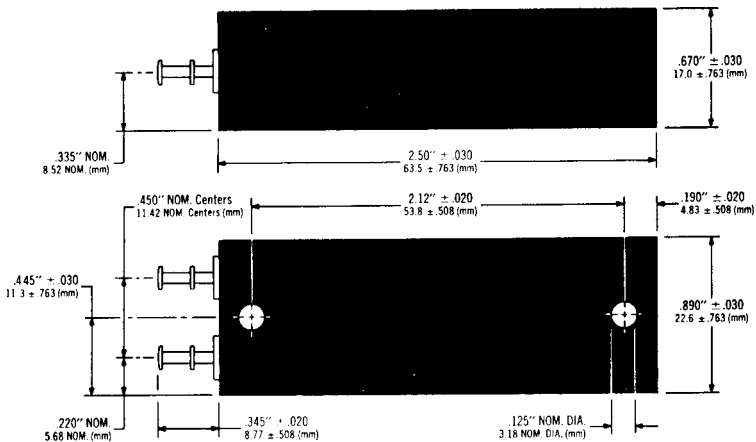
FIGURE 2

## PULSE WAVEFORM

## PACKAGE DIMENSIONS



CASE 8



CASE 9