

# TRANSIENT SUPPRESSION MODULES

## S60KS 200C S704-15K36 S704-15K36T

### FEATURES:

- Cast Epoxy Case
- Hermetic Composition
- Military Environment
- MIL-STD-704, -1399

### DESCRIPTION

SemiconComponents manufactures a broad product line of transient suppression diodes in many case styles, voltage and power ratings. Series, parallel, and series parallel arrays of these devices suitably matched and packaged will result in an almost endless number of special purpose, higher power suppression modules. This data sheet describes several of the more common.

### MAXIMUM RATINGS: (TA -25°C)

	S60KS200C CASE 1	S704-15K36 CASE 2	S704-15K36T CASE 3
Peak Pulse Power Dissipation	†15KW	††15KW	††15KW
Average Power Dissipation	10 Watts	10 Watts	10 Watts
t clamping (0 Volts to BV)	$1 \times 10^{-8}$ sec	$1 \times 10^{-12}$ sec	$1 \times 10^{-12}$ sec
t <sub>op</sub> and t <sub>stg</sub> Range		-65°C to +175°C (ALL TYPES)	
Forward Surge (1/2 60 Hz)	N/A	300 Amps	300 Amps

### ELECTRICAL CHARACTERISTICS: (TA -25°C)

	Fig. 3	Fig. 4	Fig. 4
Reverse Standoff Voltage	V <sub>R</sub> 180 Volt	31.5 Volts	31.5 Volts
Maximum Reverse Leakage at VR	I <sub>R</sub> 10µA	100µA	500µA
Min. Breakdown Voltage at 1 mA	B <sub>V</sub> 200 Volt	N/A	N/A
Min. Breakdown Voltage at 10.0 mA	B <sub>V</sub> N/A	36 Volts	36 Volts
Maximum Clamping Voltage at I <sub>PP</sub>	V <sub>C</sub> 335 Volt	51 Volts	51 Volts
Maximum Peak Pulse Current	I <sub>PP</sub> 180 Amp	300 Amps	300 Amps
Maximum Forward Voltage at 100 Amps	V <sub>F</sub> **N/A	3.0 Volts	15.0 Volts

† See Figure No. 1

†† See Figure No. 2

\* S60KS200C has BV max. of 225 V @ 1 mA IR

\*\* S60KS200C is Bipolar Device

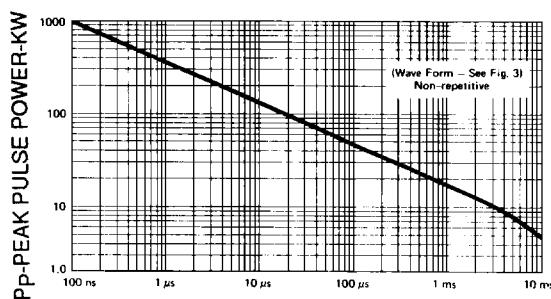


FIG 1

td - Pulse Time - sec  
Peak Pulse Power vs Pulse Time

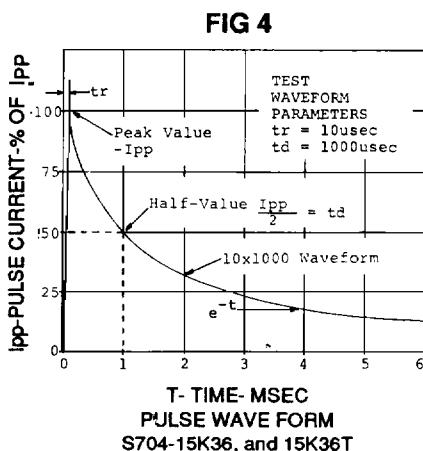
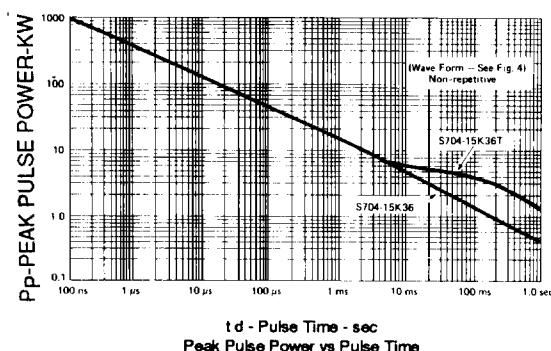


FIG 4

TEST WAVEFORM PARAMETERS  
tr = 10usec  
td = 1000usec

PULSE WAVE FORM  
S704-15K36, and 15K36T

FIG 2



td - Pulse Time - sec  
Peak Pulse Power vs Pulse Time