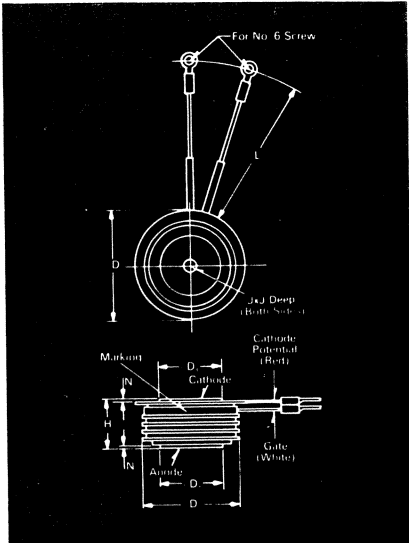


Fast Switching SCR T9GH_08

800A Avg.
(1250 RMS)
Up to 2000 Volts
50-100 μ s



T9GH Outline

Features:

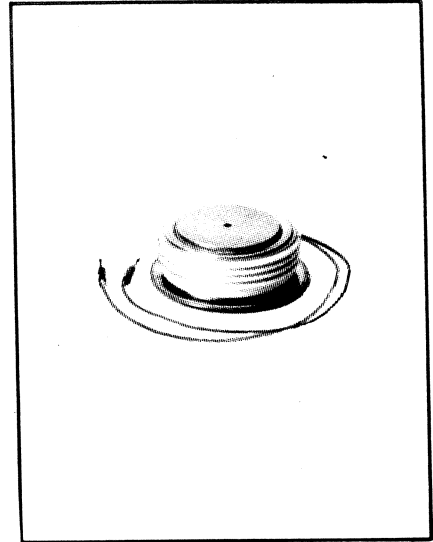
- Midway, di/namic Gate Structure
- Hard Commutation Turn-Off
- Forward Blocking Capabilities to 2000
- Low Switching Losses at High Frequency
- Soft Commutation (Feedback Diode) Testing Available

Applications:

- Induction Heating
- Transportation
- Inverters
- Crowbars

Symbol	Inches		Millimeters	
	Min.	Max.	Min.	Max.
ϕ D	2.850	2.900	72.39	73.66
ϕ D ₁	1.845	1.855	46.86	47.12
ϕ D ₂	2.560	2.640	65.02	67.06
H	1.030	1.070	26.16	27.18
ϕ J	.135	.145	3.43	3.68
J ₁	.075	.090	1.91	2.29
L	11.50	12.50	292.10	317.50
N	.050		1.27	

Creep Distance—1.20 in. min. (30.48 mm).
Strike Distance—.07 in. min. (1.78 mm).
(In accordance with NEMA standards.)
Finish—Nickel Plate.
Approx. Weight—2 lb. (908 g).
1. Dimension "H" is a clamped dimension.



Ordering Information

Type	Voltage		Current		Turn-off		Gate current		Leads		
Code	VDRM and VRRM * (V)	Code	I _{T(av)} (A)	Code	t _q usec	Code	I _{GT} (ma)	Code	Case	Code	
T9GH	600	06	800	08	50	3	300	2	T9G	DH	
	800	08			60						2
	1000	10			70						C
	1200	12			80						I
	1400	14			100						K
	1500	15									
	1600	16									
	1700	17									
	1800	18									
	2000	20									

Example

Obtain optimum device performance for your application by selecting proper order code.

Type T9GH rated at 800A average with VDRM = 1800V
t_q = 60 usec.
IGT = 300 ma, and standard 12 inch leads -- order as:

Type	Voltage	Current	Turn Off	Gate Current	Leads
T 9 G H	1 8	0 8	9	2	D H

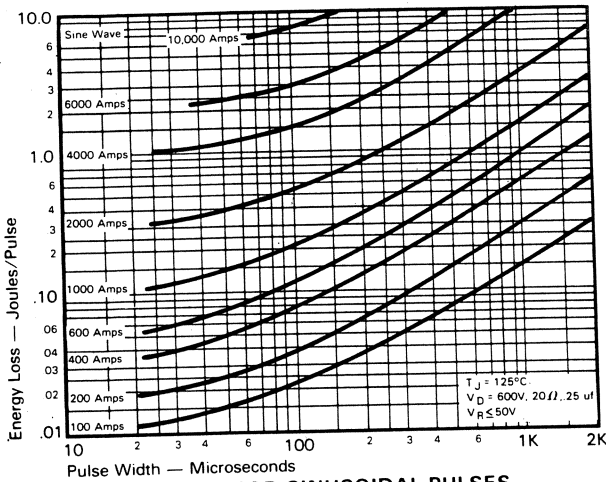
*for lower voltages consult factory

FAST SWITCHING THYRISTORS

Fast Switching SCR T9GH_08

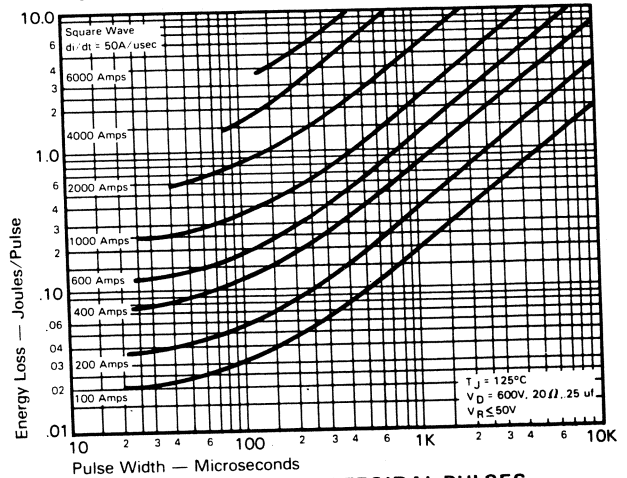
800A Avg.
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Sinusoidal Current Data

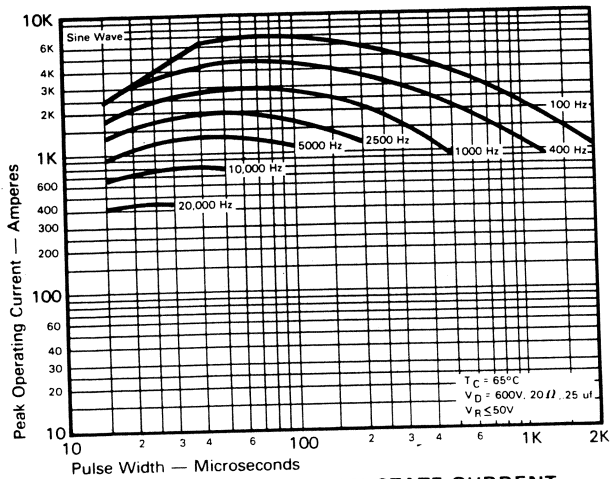


ENERGY PER PULSE FOR SINUSOIDAL PULSES

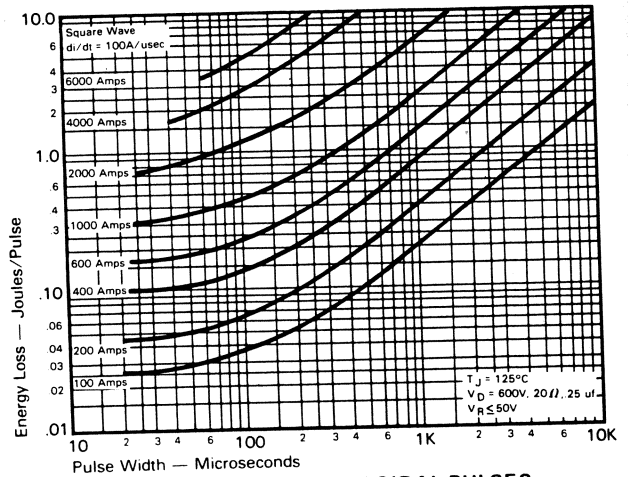
Trapezoidal Wave Current Data



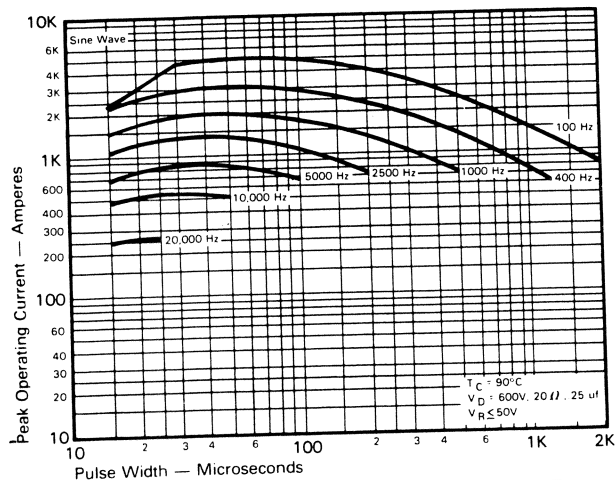
ENERGY PER PULSE FOR TRAPEZOIDAL PULSES
($di/dt = 50\text{A/usec}$)



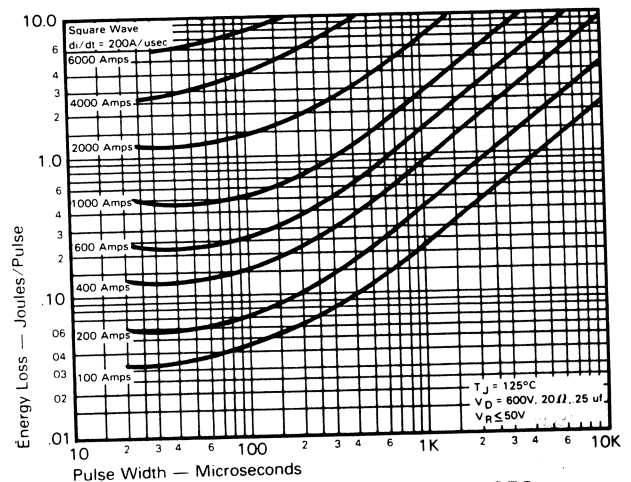
MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT
vs. PULSE WIDTH ($T_C = 65^\circ\text{C}$)



ENERGY PER PULSE FOR TRAPEZOIDAL PULSES
($di/dt = 100\text{A/usec}$)



MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT
vs. PULSE WIDTH ($T_C = 90^\circ\text{C}$)



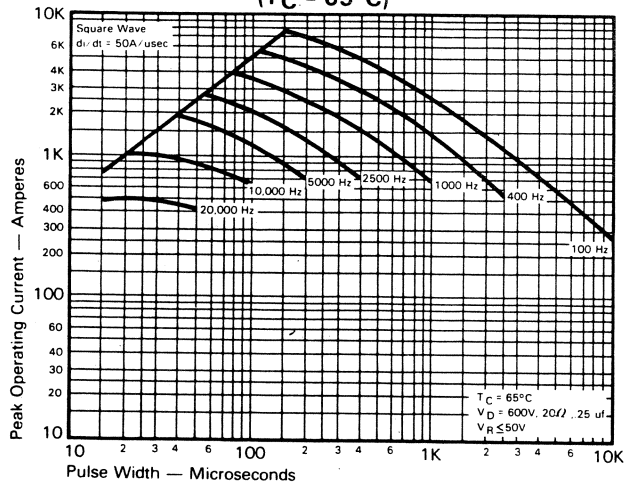
ENERGY PER PULSE FOR TRAPEZOIDAL PULSES
($di/dt = 200\text{A/usec}$)

FAST SWITCHING
THYRISTORS

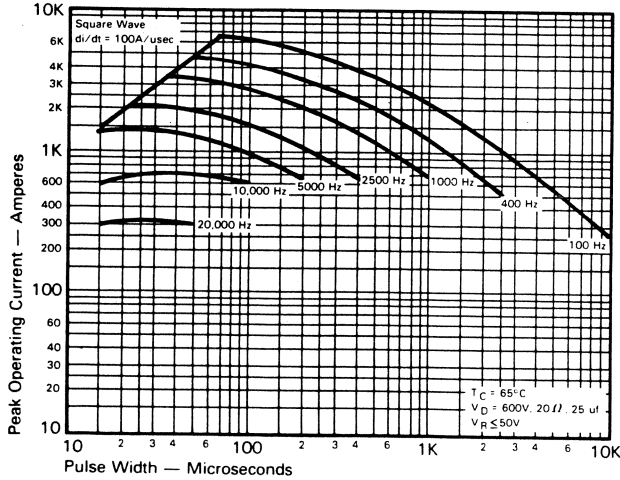
**800A Avg.
(1250 RMS)
Up to 2000 Volts
50-100 μ s**

**Fast Switching
SCR
T9GH_08**

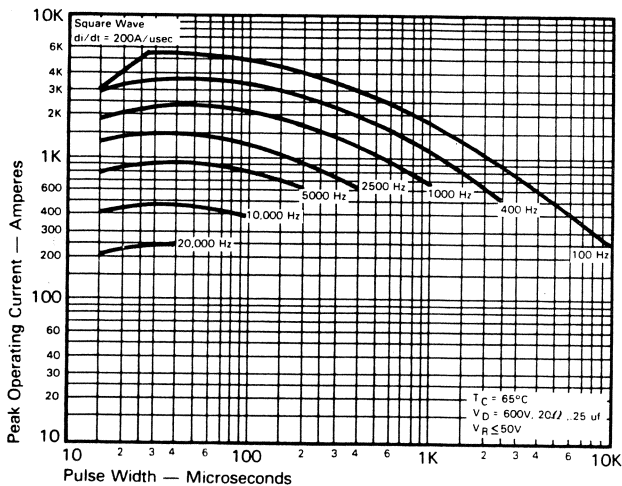
**Trapezoidal Wave Current Data
($T_C = 65^\circ\text{C}$)**



MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT vs. PULSE WIDTH ($d_i/d_t = 50\text{A/usec}$)

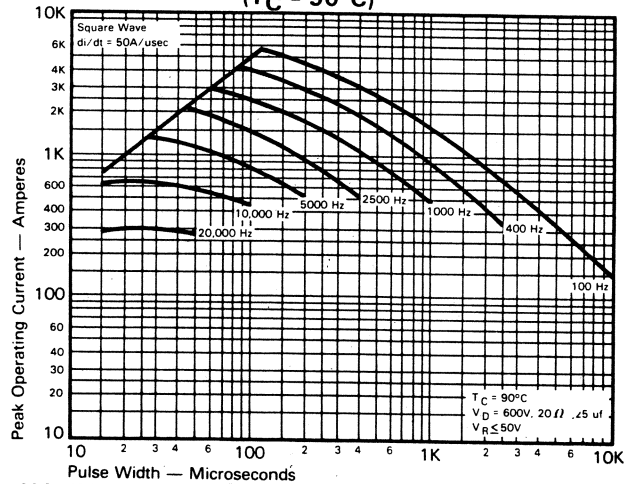


MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT vs. PULSE WIDTH ($d_i/d_t = 100\text{A/usec}$)

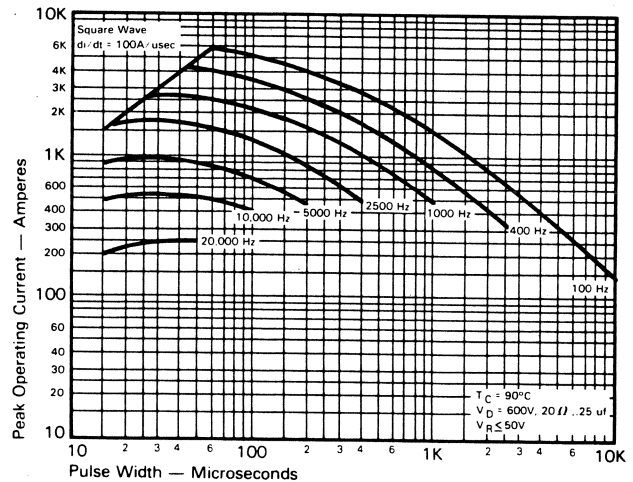


MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT vs. PULSE WIDTH ($d_i/d_t = 200\text{A/usec}$)

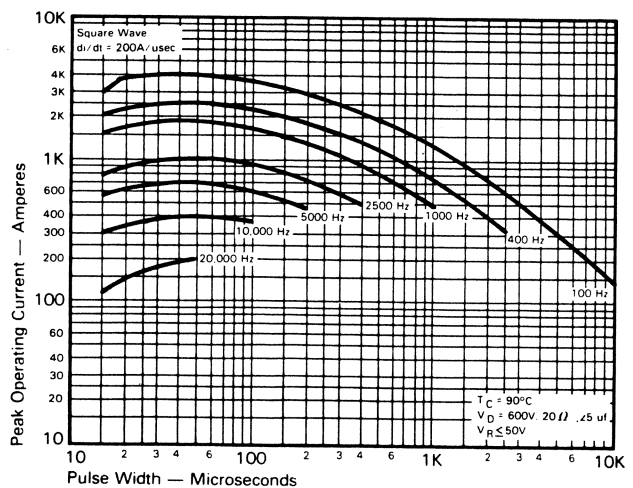
**Trapezoidal Wave Current Data
($T_C = 90^\circ\text{C}$)**



MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT vs. PULSE WIDTH ($d_i/d_t = 50\text{A/usec}$)



MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT vs. PULSE WIDTH ($d_i/d_t = 100\text{A/usec}$)



MAXIMUM ALLOWABLE PEAK ON-STATE CURRENT vs. PULSE WIDTH ($d_i/d_t = 200\text{A/usec}$)

FAST SWITCHING THYRISTORS