

electrical characteristics at 25°C case temperature (unless otherwise noted) (continued)

PARAMETER	TEST CONDITIONS			MIN	TYP	MAX	UNIT
$I_H$ Holding current	$V_{supply} = +12 V \dagger$ $V_{supply} = -12 V \dagger$	$I_G = 0$ $I_G = 0$	Init' $I_{TM} = 100 mA$ Init' $I_{TM} = -100 mA$		22 -12	40 -40	mA
$I_L$ Latching current	$V_{supply} = +12 V \dagger$ $V_{supply} = -12 V \dagger$	(see Note 5)				80 -80	mA
dv/dt Critical rate of rise of off-state voltage	$V_D = \text{Rated } V_D$	$I_G = 0$	$T_C = 110^\circ C$		$\pm 400$		V/ $\mu s$
dv/dt <sub>(c)</sub> Critical rise of commutation voltage	$V_D = \text{Rated } V_D$ di/dt = 0.5 $I_{T(RMS)}/ms$		$T_C = 80^\circ C$ $I_T = 1.4 I_{T(RMS)}$	$\pm 1.2$	$\pm 9$		V/ $\mu s$
di/dt Critical rate of rise of on-state current	$V_D = \text{Rated } V_D$ di <sub>G</sub> /dt = 50 mA/ $\mu s$	$I_{GT} = 50 mA$	$T_C = 110^\circ C$		$\pm 100$		A/ $\mu s$

† All voltages are with respect to Main Terminal 1.

NOTE 5: The triacs are triggered by a 15-V (open-circuit amplitude) pulse supplied by a generator with the following characteristics:

$R_G = 100 \Omega$ ,  $t_{p(g)} = 20 \mu s$ ,  $t_r \leq 15 ns$ ,  $f = 1 kHz$ .

thermal characteristics

PARAMETER	MIN	TYP	MAX	UNIT
$R_{\theta JC}$ Junction to case thermal resistance			1.9	°C/W
$R_{\theta JA}$ Junction to free air thermal resistance			62.5	°C/W

TYPICAL CHARACTERISTICS

GATE TRIGGER CURRENT  
vs

CASE TEMPERATURE

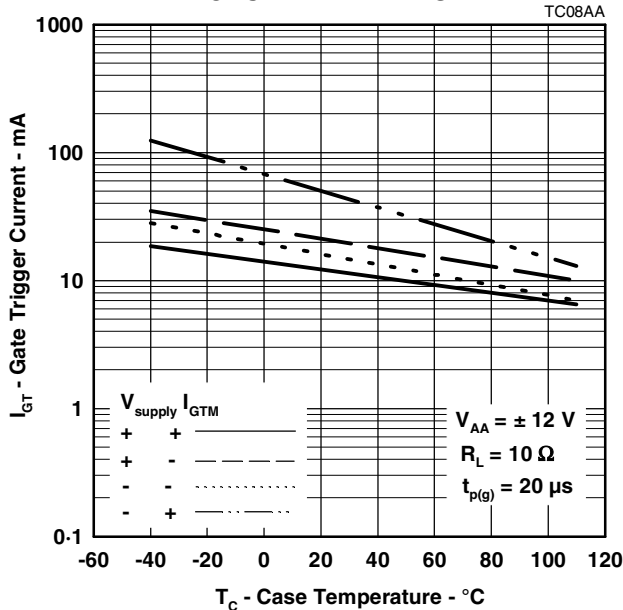


Figure 1.

GATE TRIGGER VOLTAGE  
vs

CASE TEMPERATURE

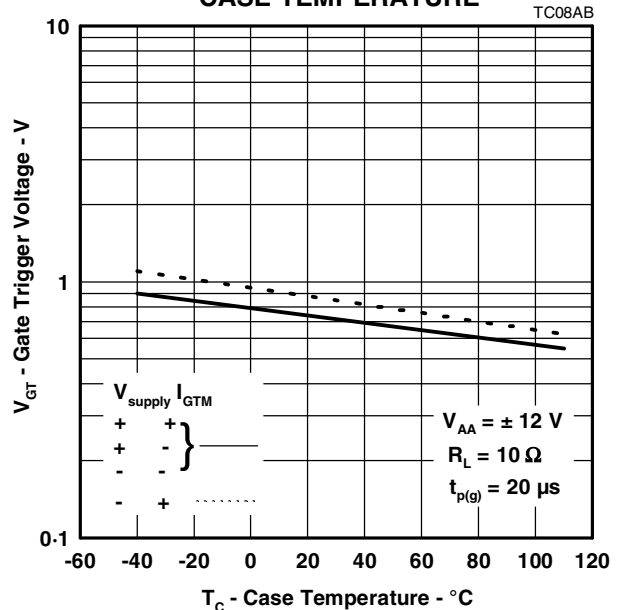


Figure 2.

**PRODUCT INFORMATION**

DECEMBER 1971 - REVISED SEPTEMBER 2002  
Specifications are subject to change without notice.

TYPICAL CHARACTERISTICS

HOLDING CURRENT  
vs  
CASE TEMPERATURE

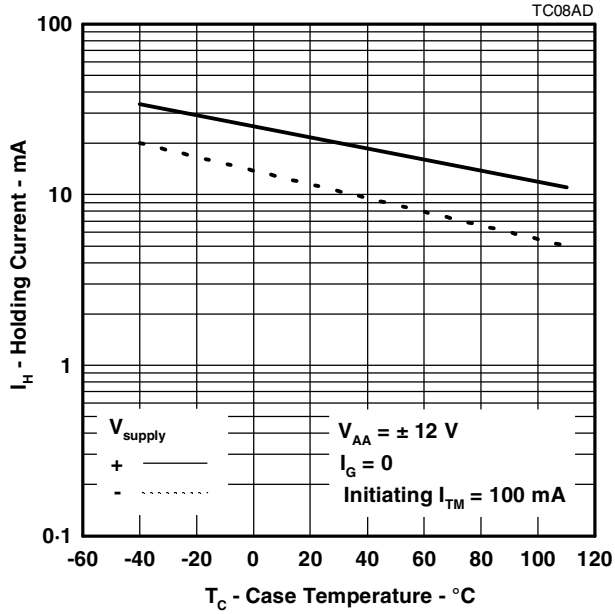


Figure 3.

LATCHING CURRENT  
vs  
CASE TEMPERATURE

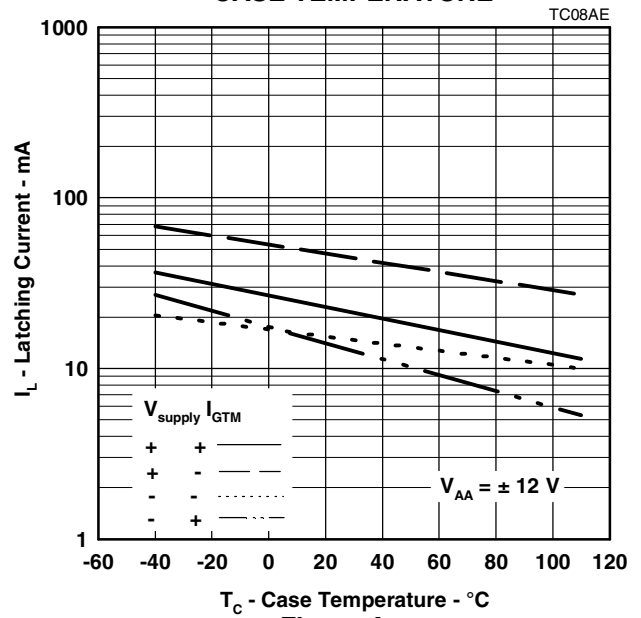


Figure 4.

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