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†	I_G = 0	Init' I_{TM} = 100 mA		10	30	mA
		V_{supply} = -12 V†	I_G = 0	Init' I_{TM} = -100 mA		-6	-30	
I_L	Latching current	V_{supply} = +12 V†	(see Note 6)				50	mA
		V_{supply} = -12 V†					-50	
dv/dt	Critical rate of rise of off-state voltage	V_{DRM} = Rated V_{DRM}	I_G = 0	T_C = 110°C		±100		V/µs
$dv/dt_{(c)}$	Critical rise of commutation voltage	V_{DRM} = Rated V_{DRM}	I_{TRM} = ±12 A	T_C = 85°C (see figure 7)	±5			V/µs

† All voltages are with respect to Main Terminal 1.

NOTES: 5. This parameter must be measured using pulse techniques, t_p = ≤ 1 ms, duty cycle ≤ 2 %. Voltage-sensing contacts separate from the current carrying contacts are located within 3.2 mm from the device body.

6. The triacs are triggered by a 15-V (open-circuit amplitude) pulse supplied by a generator with the following characteristics: R_G = 100 Ω, $t_{p(g)}$ = 20 µs, t_r = ≤ 15 ns, f = 1 kHz.

thermal characteristics

PARAMETER		MIN	TYP	MAX	UNIT
$R_{\theta JC}$	Junction to case thermal resistance			1.8	°C/W
$R_{\theta JA}$	Junction to free air thermal resistance			62.5	°C/W

TYPICAL CHARACTERISTICS

GATE TRIGGER CURRENT vs CASE TEMPERATURE

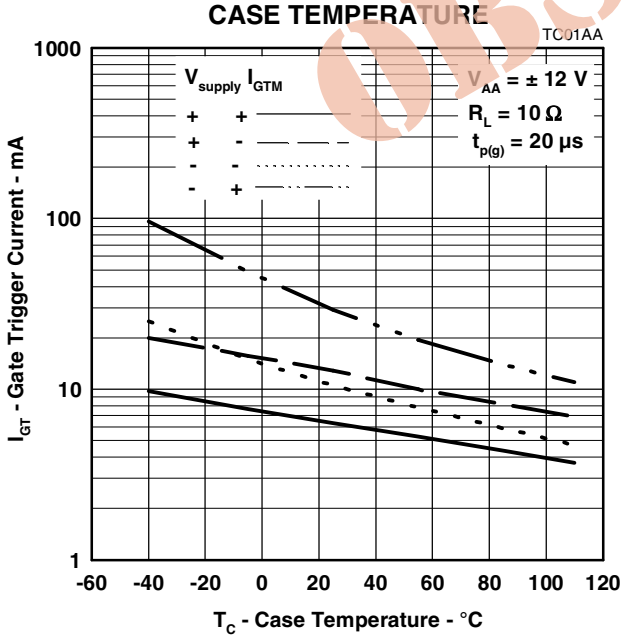


Figure 1.

GATE TRIGGER VOLTAGE vs CASE TEMPERATURE

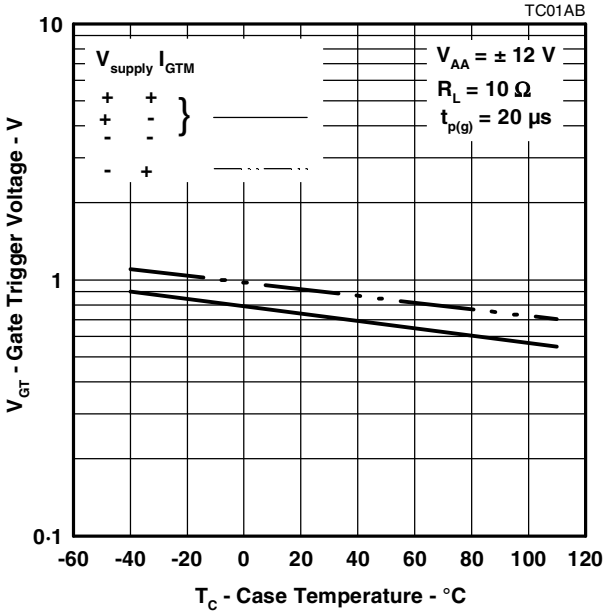


Figure 2.

BOURNS®

TYPICAL CHARACTERISTICS

HOLDING CURRENT vs CASE TEMPERATURE

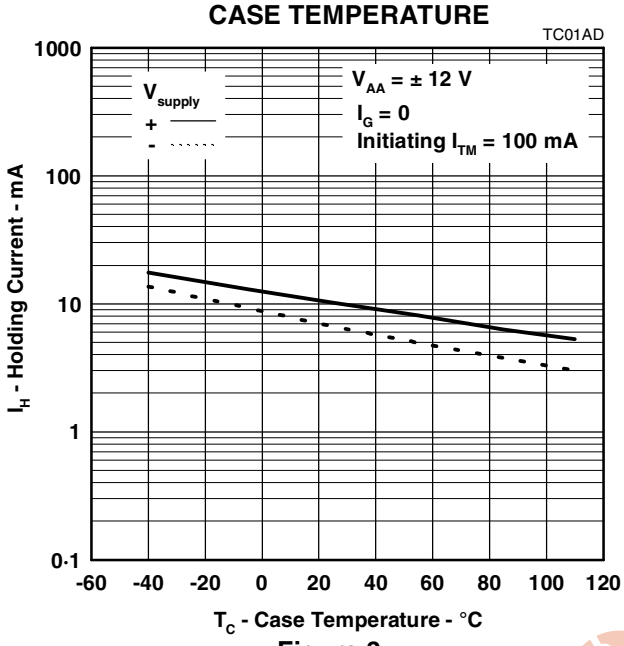


Figure 3.

LATCHING CURRENT vs CASE TEMPERATURE

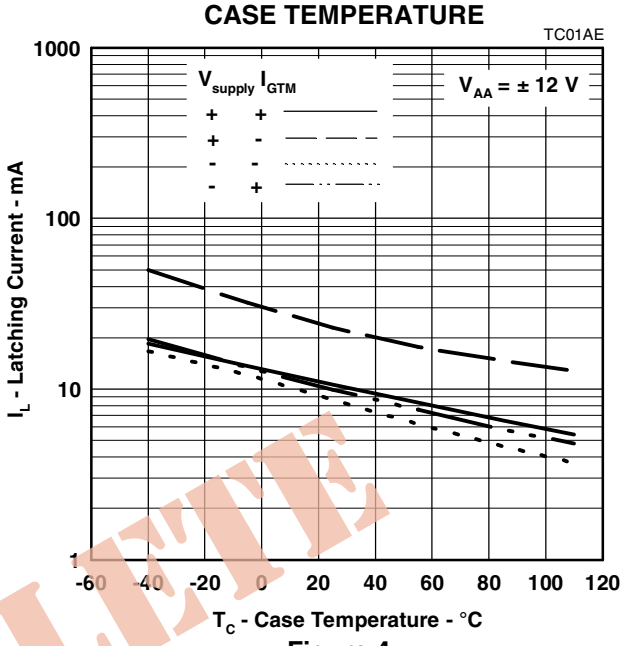


Figure 4.

THERMAL INFORMATION

MAX RMS ON-STATE CURRENT vs CASE TEMPERATURE

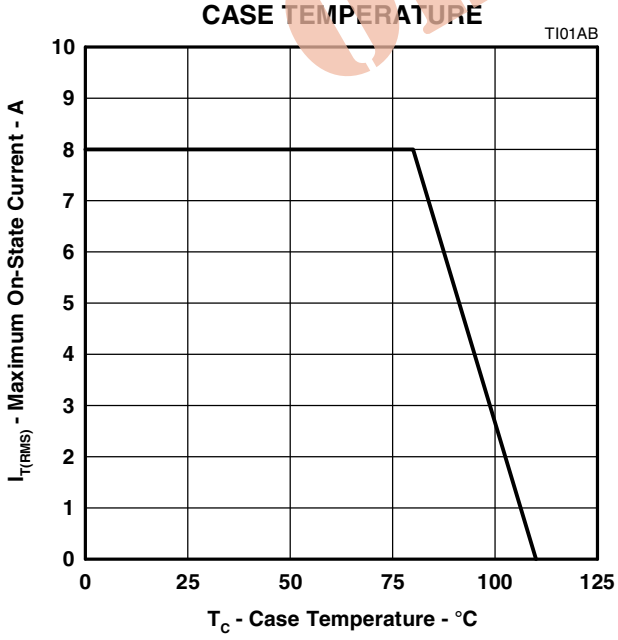


Figure 5.

MAX AVERAGE POWER DISSIPATED vs RMS ON-STATE CURRENT

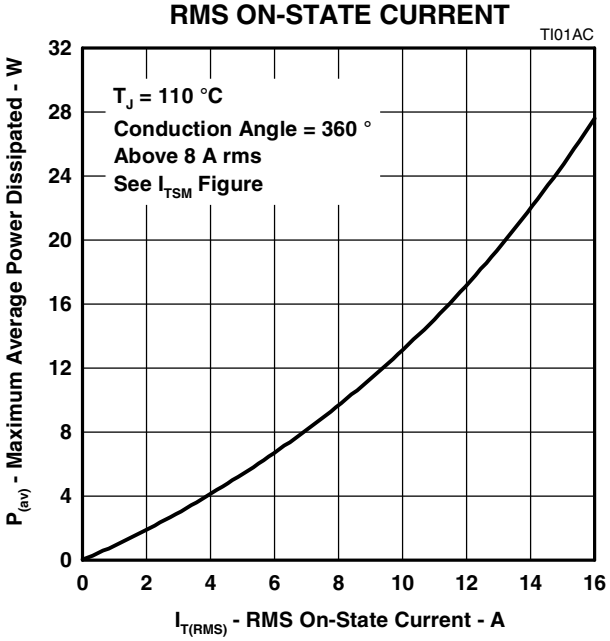
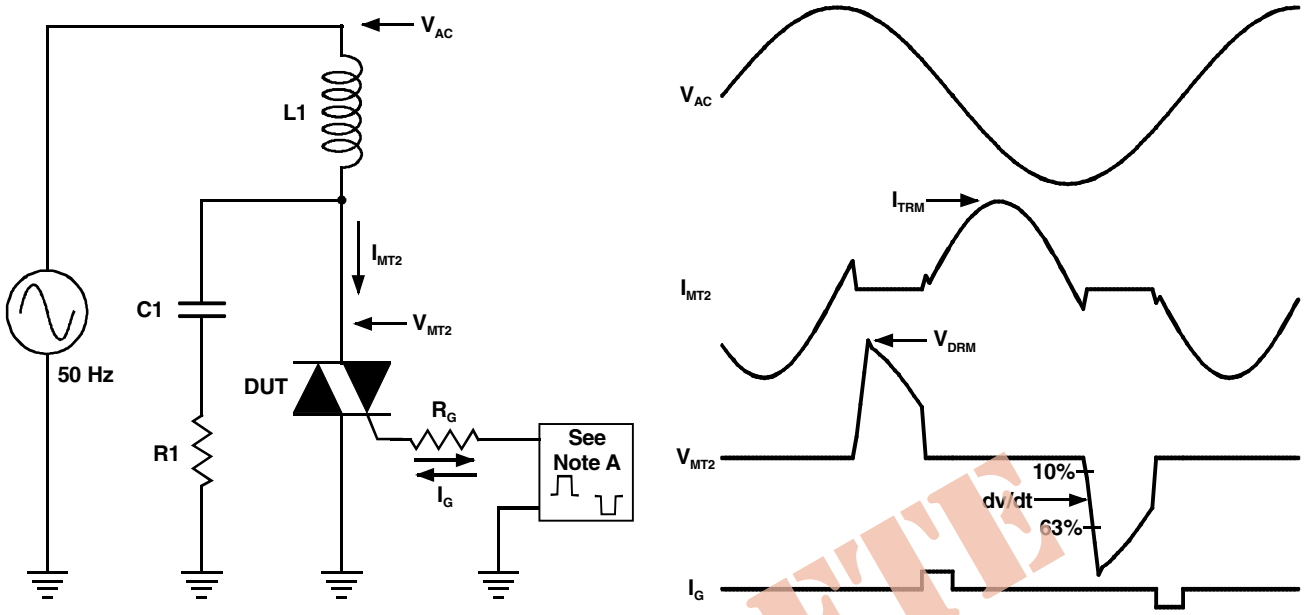


Figure 6.

PARAMETER MEASUREMENT INFORMATION



NOTE A: The gate-current pulse is furnished by a trigger circuit which presents essentially an open circuit between pulses. The pulse is timed so that the off-state-voltage duration is approximately 800 µs.

PMC2AA

Figure 7.