

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

PARAMETER		TEST CONDITIONS			MIN	TYP	MAX	UNIT
V _{GT}	Gate trigger voltage	V _{supply} = +12 V†	R _L = 10 Ω	t _{p(g)} > 20 μs			2.2	V
		V _{supply} = +12 V†	R _L = 10 Ω	t _{p(g)} > 20 μs			-2.2	
		V _{supply} = -12 V†	R _L = 10 Ω	t _{p(g)} > 20 μs			-2.2	
		V _{supply} = -12 V†	R _L = 10 Ω	t _{p(g)} > 20 μs			3	
V _T	On-state voltage	I _T = ±8.4 A	I _G = 50 mA	(see Note 5)			±1.7	V
I _H	Holding current	V _{supply} = +12 V†	I _G = 0	Init' I _{TM} = 100 mA			30	mA
		V _{supply} = -12 V†	I _G = 0	Init' I _{TM} = -100 mA			-30	
I _L	Latching current	V _{supply} = +12 V†	(see Note 6)			4		mA
		V _{supply} = -12 V†				-2		
dv/dt	Critical rate of rise of off-state voltage	V _{DRM} = Rated V _{DRM}	I _G = 0	T _C = 110°C		±20		V/μs
dv/dt _(c)	Critical rise of commutation voltage	V _{DRM} = Rated V _{DRM}	I _{TRM} = ±8.4 A	T _C = 70°C	±2	±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 _{θJC}	Junction to case thermal resistance			2.5	°C/W
R _{θJA}	Junction to free air thermal resistance			62.5	°C/W

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