Average gate power dissipation (T_j=150)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	4	kV

(T_j=25 unless otherwise specified)

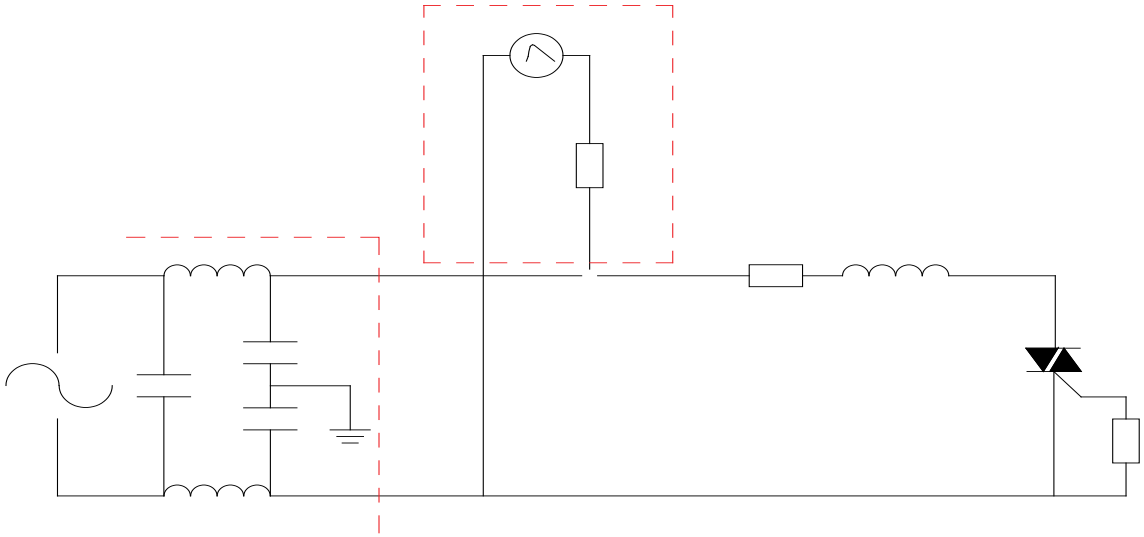
Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	20	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j =150 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G =1.2I_{GT}	-	MAX.	30	mA
				40	
I_H	I_T =100mA		MAX.	25	mA
dV/dt	V_D=540V Gate Open T_j =150		MIN.	800	V/μs
(dI/dt)c	(dV/dt)c=20V/μs, T_j=150		MIN.	5	A/ms
t_{on}	I_G=40mA I_A=200mA I_R=20mA T_j=25		TYP.	3	μs
t_{off}				30	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =5.5A t_p=380μs	T_j=25	1.4	V
V_{TO}	Threshold voltage	T_j=150	0.6	V
R_D	Dynamic resistance	T_j=150	129	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25	5	μA
I_{RRM}		T_j=150	1	mA

FIG.1: Maximum power dissipation versus RMS on-state current

FIG.2: RMS on-state current versus case temperature

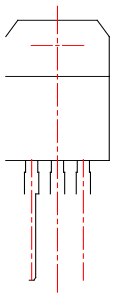
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		H- I- J			
T0420H-8A	800	20	TO-220A(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last updated
Oct.11, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA





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