Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	4.5	kV

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	35	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
				60	
I_H	I_T =500mA		MAX.	30	mA
dV/dt	V_D=540V Gate Open T_j =150		MIN.	500	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}				60	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =17A t_p=380μs	T_j=25	1.4	V
V_{TO}	Threshold voltage	T_j=150	0.75	V
R_D	Dynamic resistance	T_j=150	37	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25	5	μA
I_{RRM}		T_j=150	2	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	1.3	/W
$R_{th(j-a)}$	junction to ambient (AC, in free air, S=2cm^2)	45	/W

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

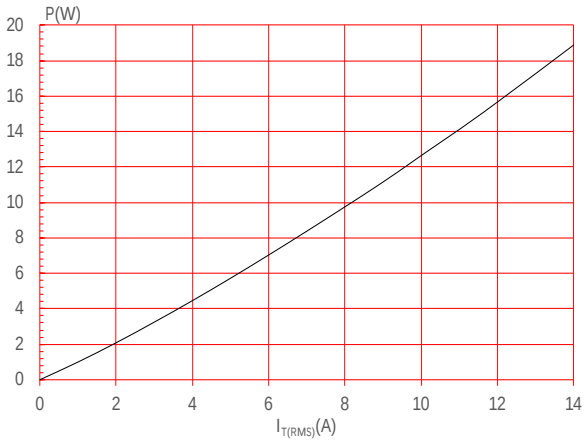


FIG.2: RMS on-state current versus case temperature

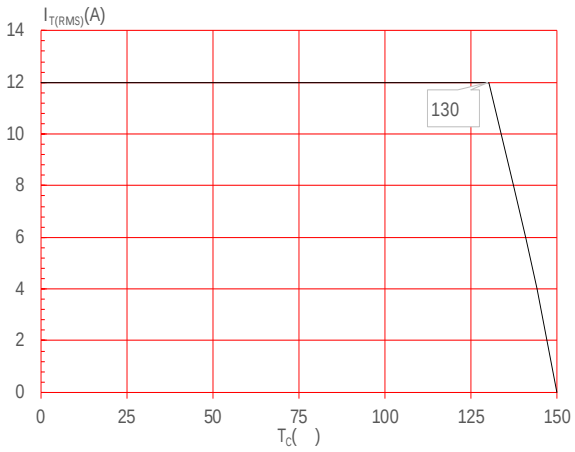
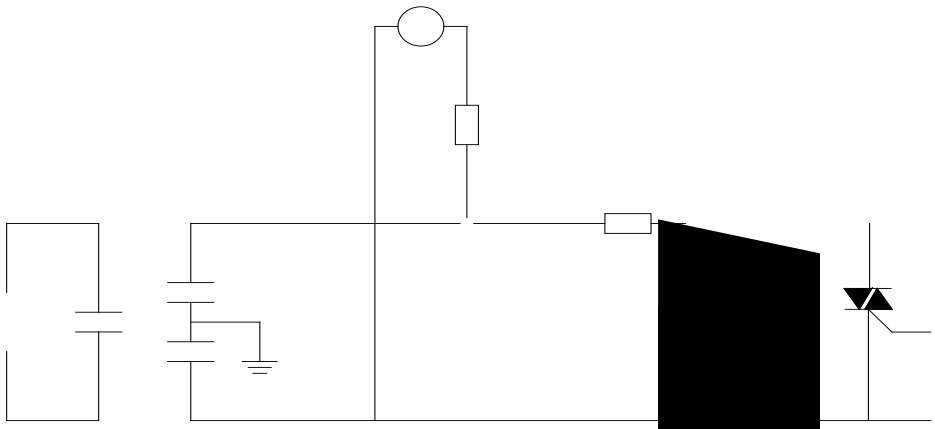


FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4,copper thickness:35μm)(full cycle)

FIG.4: Surge peak on-state current versus number of cycles

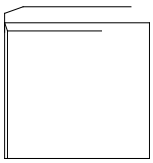
FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



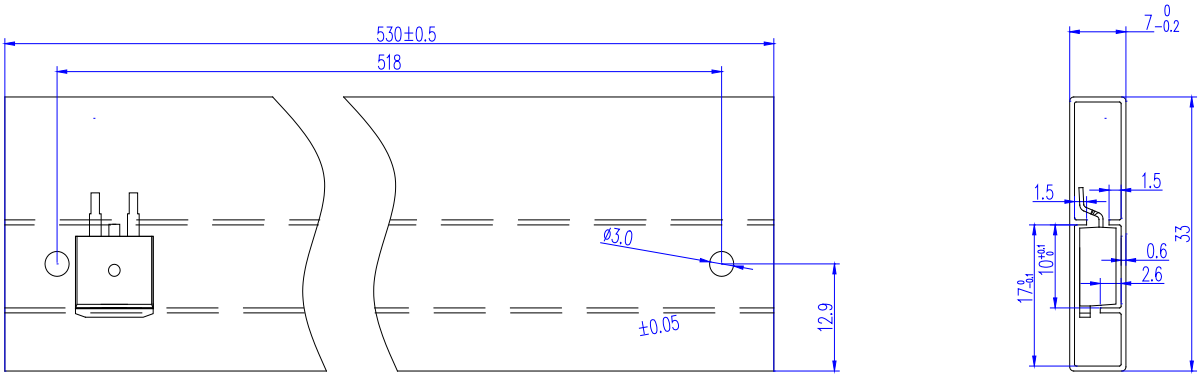
Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T1235H-8E	800	35	TO-263	50	Tube
T1235H-8E-TR				800	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.40		9.60	0.37		0.378
D	2.40			0.094		
E	1.20		1.50	0.047		0.059
F	0.75		0.85	0.029		0.033
G			1.50			
H	4.40		4.70	0.173		0.185
J	2.30		2.70	0.091		0.106
K	0.38		0.55	0.015		0.022
L	0		0.25			
M	1.25		1.35			



PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-263	TUBE	50	1,000	5,000

Dimensions						
Ref.	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
W	23.70	24.00	24.30			
E	1.65	1.75	1.85			
F	11.40	11.50	11.60			
D0	-	1.50	1.60			
D1		1.50	1.60			
P0	3.90	4.00	4.10			
P1	15.90	16.00	16.10			
P2	1.90	2.00	2.10			
A0		10.90	11.-5 (6.)4.9 (00)-1661.85			
B0						
K0						
t						

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