



Peak pulse voltage ( $T_j=25$ ; non-repetitive, off-state; FIG.8)	$V_{pp}$	3	kV
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**ELECTRICAL CHARACTERISTICS** ( $T_j=25$  unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V$ $R_L=33$	- -	MAX.	35	mA
$V_{GT}$		- -	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM}$ $T_j=150$ $R_L=3.3k$	- -	MIN.	0.2	V
$I_L$	$I_G=1.2I_{GT}$	-	MAX.	50	mA
				70	
$I_H$	$I_T=100mA$		MAX.	45	mA
$dV/dt$	$V_D=540V$ Gate Open $T_j=150$		MIN.	1000	V/ $\mu s$
$(dI/dt)_c$	$(dV/dt)_c=20V/\mu s$ , $T_j=150$		MIN.	5	A/ms
$t_{on}$	$I_G=40mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	3	$\mu s$
$t_{off}$				30	

**STATIC CHARACTERISTICS**

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=11A$ $t_p=380\mu s$	$T_j=25$	1.4	V
$V_{TO}$	Threshold voltage	$T_j=150$	0.79	V
$R_D$	Dynamic resistance	$T_j=150$	51	m

 $I_{DRM}$ 
 $V_D=V_{DRM}$   $V_R=V_{RRM}$  V



**FIG.1:** Maximum power dissipation versus axim (TE)-0 T10.199.4668 0.4onM

**FIG.7:** Relative variations of gate trigger current, holding current and latching current versus junction temperature

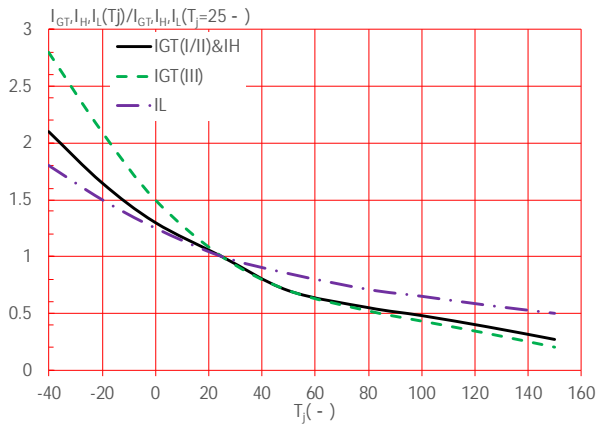
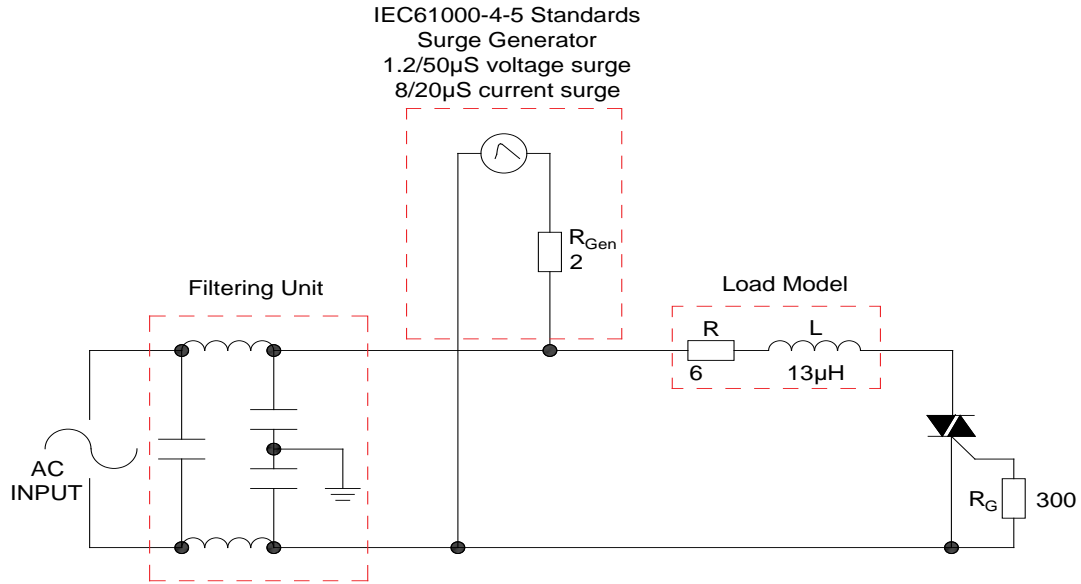
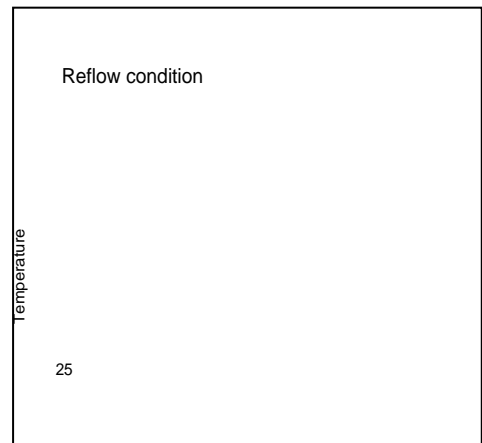


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



**SOLDERING PARAMETERS**

Reflow Condition		Pb-Free assembly (see figure at right)
Pre Heat	-Temperature Min ( $T_{s(min)}$ )	+150
	-Temperature Max( $T_{s(max)}$ )	+200
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquidus Temp ( $T_L$ ) to peak)		3 /sec. Max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3 /sec. Max
Reflow	-Temperature( $T_L$ )(Liquidus)	+217
	-Temperature( $t_L$ )	60-150 secs.
Peak Temp ( $T_p$ )		+260(+0/-5)
Time within 5 of actual Peak Temp ( $t_p$ )		20-40secs.
Ramp-down Rate		6 /sec. Max
Time 25 to Peak Temp ( $T_p$ )		8 min. Max
Do not exceed		+260



ORDERING INFORMATION



PACKAGE MECHANICAL DATA

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	0.370		0.378
D	2.40			0.094		
E	1.20		1.50	0.047(0)	TJ 0 Tc 0 Tw 31G	
F						



**T835H-8E**