



## ELECTRICAL CHARACTERISTICS (unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V$ $R_L=33$	- -	MAX.	10	mA
				25	
$V_{GT}$		ALL	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	ALL	MIN.	0.2	V
$I_L$	$I_G=1.2I_{GT}$	- -	MAX.	20	mA
				35	
$I_H$	$I_T=500mA$		MAX.	20	mA
$dV/dt$	$V_D=540V$ Gate Open $T_j=125$		MIN.	200	V/s
$(dV/dt)_c$	$(dI/dt)_c=2.7A/ms$ , $T_j=125$		MIN.	5	9 V
$t_{on}$	$I_G=40mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	1.5	s
$t_{off}$				15	

## STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=10A$ $t_p=380$ s	$T_j=25$	1.5	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.8	V
$R_D$	Dynamic resistance	$T_j=125$	53	P
$I_{DRM}$	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	A
$I_{RRM}$		$T_j=125$	0.45	mA

## THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	2.2	/W
$R_{th(j-a)}$	junction to ambient (AC, in free air, $S=2cm^2$ )	60	/W

ORDERING INFORMATION



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

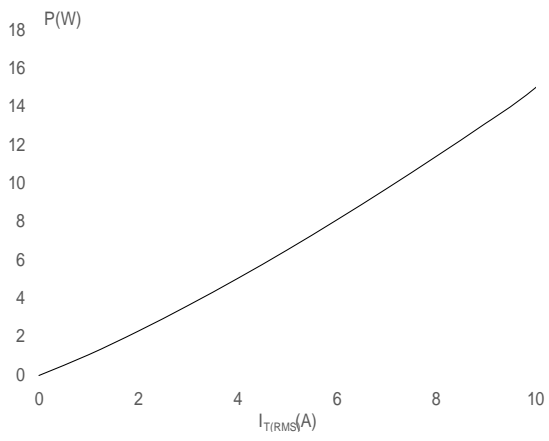


FIG.2: RMS on-state current versus case temperature

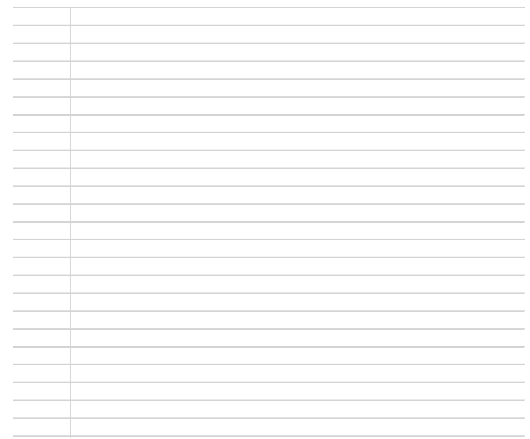


FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

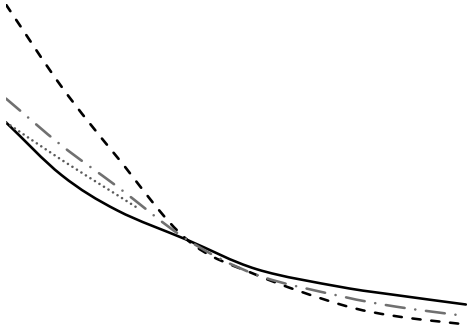
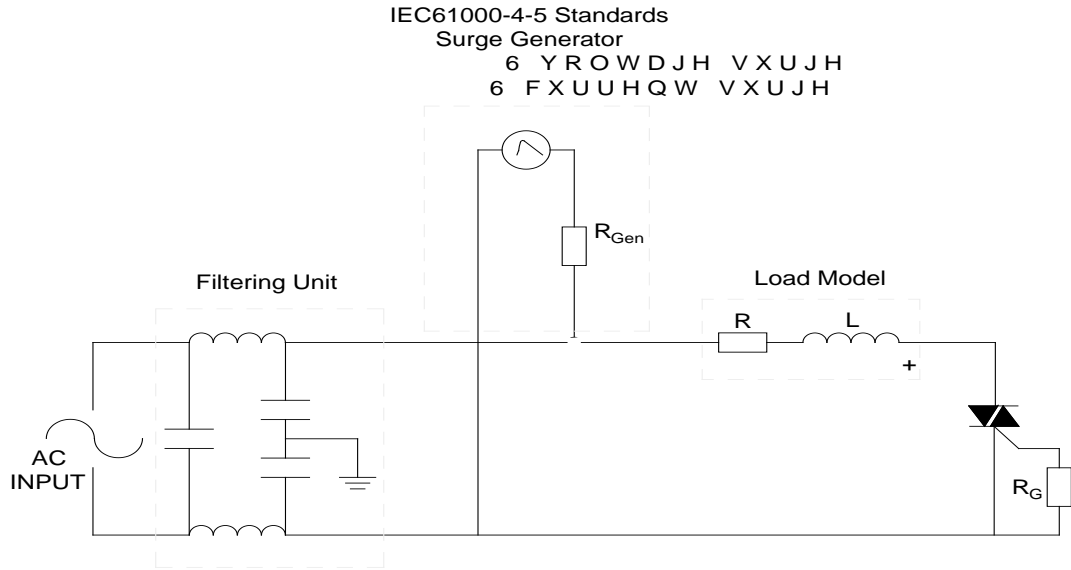


FIG.8: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

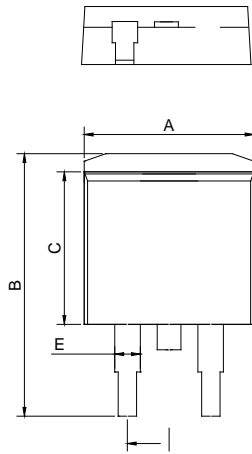


## ORDERING INFORMATION

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		-	-			
JST137E-800E	800	10	25	TO-263	50	Tube
JST137E-800E-TR					800	Tape & Reel

scnD>>27536 654.04 74.4 638\* 1 Td.0427536 65416 074.4 638\* 0292 49

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		0.059
F	0.75		0.85	0.029		0.033



