ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33Ω	- -	MAX.	50	mA
				70	
V_{GT}		ALL	MAX.	1.3	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	ALL	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	- -	MAX.	80	mA
				160	
I_H	I_T=500mA		MAX.	80	mA
dV/dt	V_D=400V Gate Open T_j=125		MIN.	1500	V/μs
(dV/dt)c	(dI/dt)c=20A/ms, T_j=125		MIN.	20	V/μs
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	10	μs
t_{off}				70	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=60A t_p=380μs	T_j=25	1.4	V
V_{TO}	Threshold voltage	T_j=125	0.73	V
R_D	Dynamic resistance	T_j=125	10	mΩ
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	5	μA
I_{RRM}		T_j=125	3	mA

THERMAL RESISTANCES

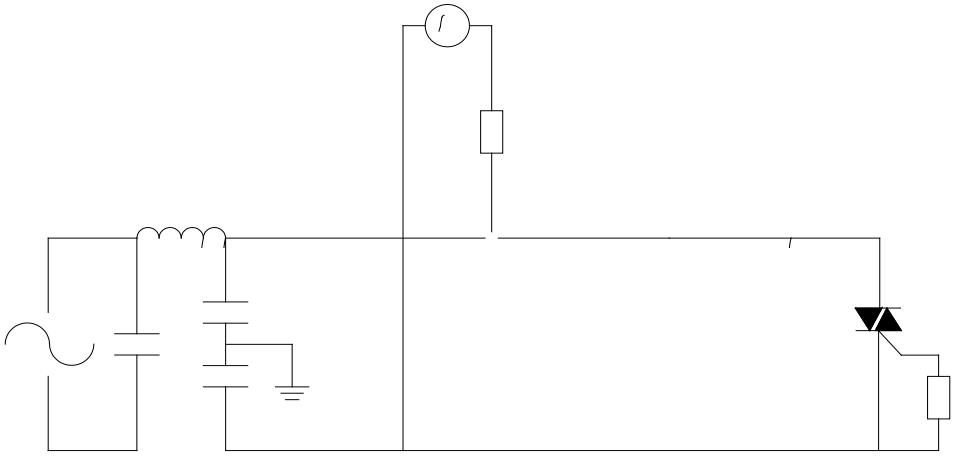
Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	0.75	/W
$R_{th(j-a)}$	junction to ambient (AC)	50	/W

ORDERING INFORMATION

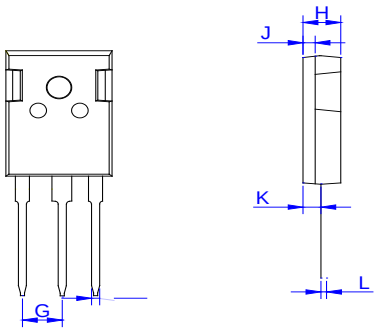
J ST 41 SJ -600 B

FIG.1: u6 (n 22 4(s)1 (ue Tw 10 0 Td ( )Tj ET 55.25.3649.56 484.8

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



PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.50		16.10	0.610		0.634
B1	3.10		3.50	0.122		0.138
C	19.70		20.30	0.776		0.799
D	2.90		3.30	0.114		0.130
E	1.90		2.30	0.075		0.091
F	1.00		1.40	0.039		0.055
G		5.44			0.214	
H	4.80		5.20	0.189		0.205
J	1.90		2.10	0.075		0.083
K	2.20		2.50	0.087		0.098
L	0.41		0.79	0.016		0.031