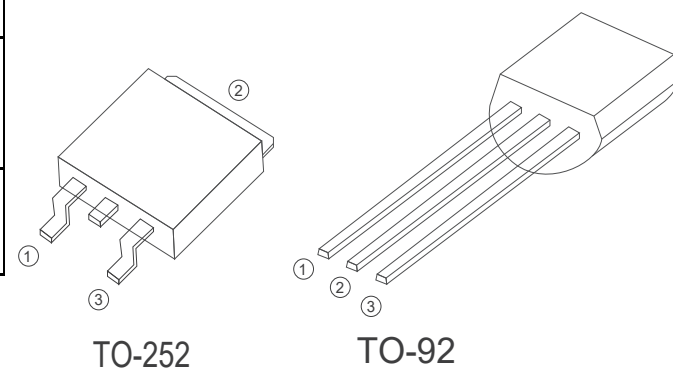


IT(RMS)		2A
VDRM/VRRM		600V
VTM		1.7V



FEATURES

IT(RMS): 2A

VGT: 0.8V

VDRM VRRM:600V

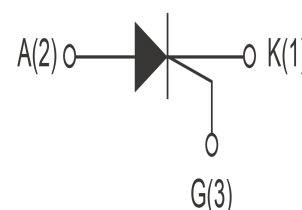
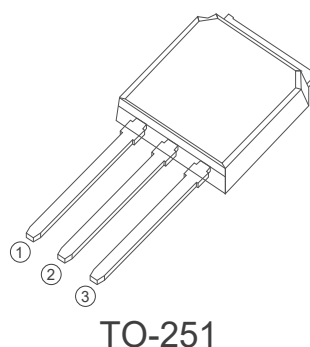
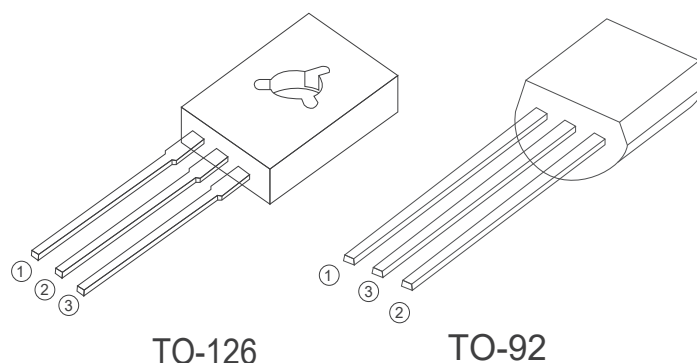
APPLICATIONS

Automatic gas lighter, Battery charger

Electric blanket, Electronic jar, Various temperature control

Electric sewing machine, Speed control of miniature type motor

Solid state static switches etc



Absolute Maximum Ratings (T_j=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Ratings	Unit
VDRM VRRM	Repetitive Peak Off-State Voltage	2P4M	600	V
IT(RMS)	R.M.S On-State Current		2	A
IT(AV)	average On-State Current		3	A
ITSM	Surge On-State Current	F=50Hz, tp=10ms	20	A
I ² t	I ² t for fusing	Tp=10ms	1.7	A ² s
PG(AV)	Average Gate Power Dissipation	T _j =125°C	0.5	W
PGM	Peak Gate Current	tp=20us T _j =125°C	1	W
T _j	Operating Junction Temperature		~40~125	°C
TSTG	Storage Temperature		~40~150	°C

Electrical Characteristics (T_j=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Value	Unit
IDRM	Repetitive Peak Off-State Current	T _c =25°C	≤5	uA
		T _c =110°C	≤100	uA
IRRM	Repetitive Peak Reverse Current	T _c =25°C	≤5	uA
		T _c =110°C	≤100	uA
VTM	Forward "on" voltage	IT=2A tp=380us	≤1.7	V
VGD	Gate nontrigger voltage	VD=VDRM, T _j =110°C, RGK=1KΩ, RL=3.3KΩ	≥0.2	V
IL	Latching current	IG=1.2IGT	≤6	mA
IH	Holding current	VD=12V ,IGT=0.1A	≤5	mA
VGT	Gate trigger voltage	VD=12V ,IGT=0.1A	≤0.8	V
IGT	Gate trigger current	VD=12V, IT=0.1A	≤120	uA
dv/dt	Critical-rate of rise of commutation voltage	VD=2/3VDRM, T _j =110°C, RGK=1KΩ	≥10	V/us
Rth(j-c)	Thermal resistance	Junction to case	3.0	°C/W

FIG1

Maximum power dissipation versus RMS on-state current

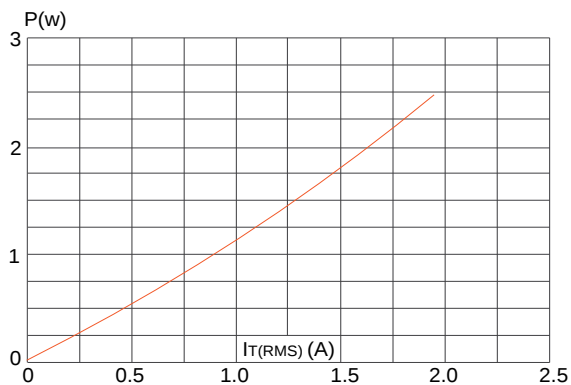


FIG2

RMS on-state current versus case temperature

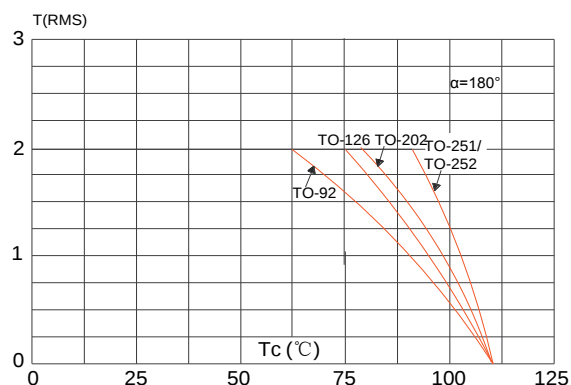


FIG3

Surge peak on-state current versus number of cycles

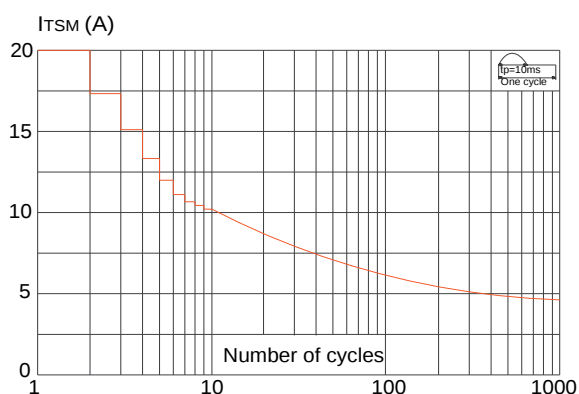


FIG4

On-state characteristics (maximum values)

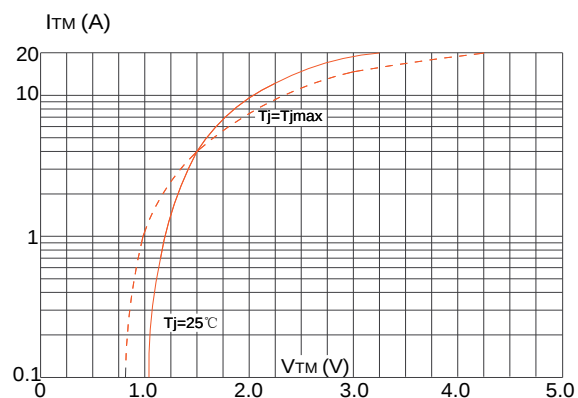


FIG5

Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of I^2t ($dI/dt < 100\text{A}/\mu\text{s}$)

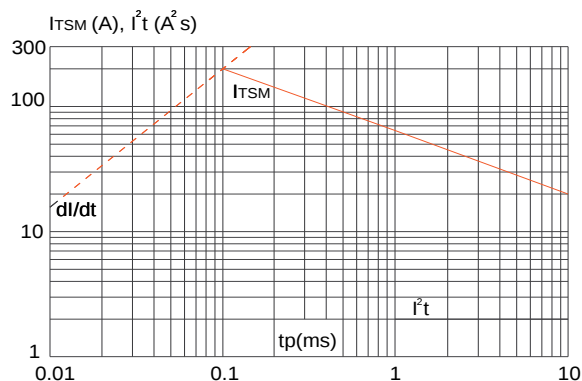
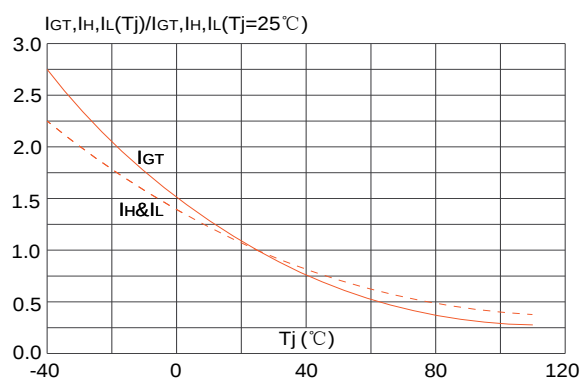
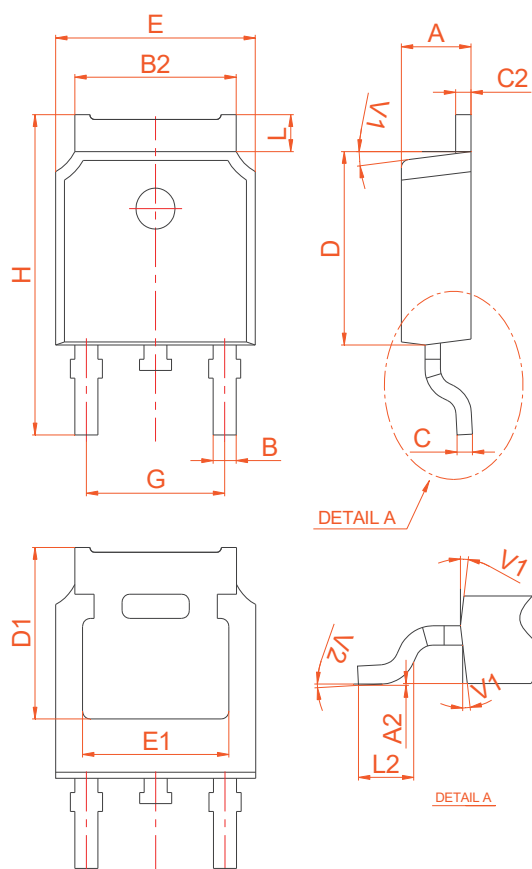


FIG6

FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



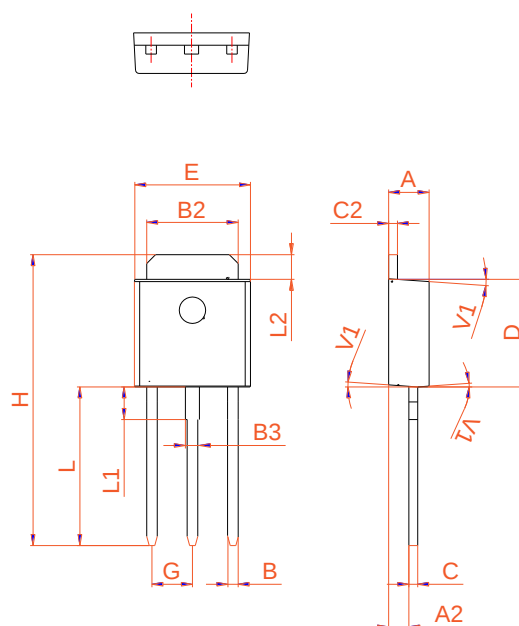
PACKAGE MECHANICAL DATA



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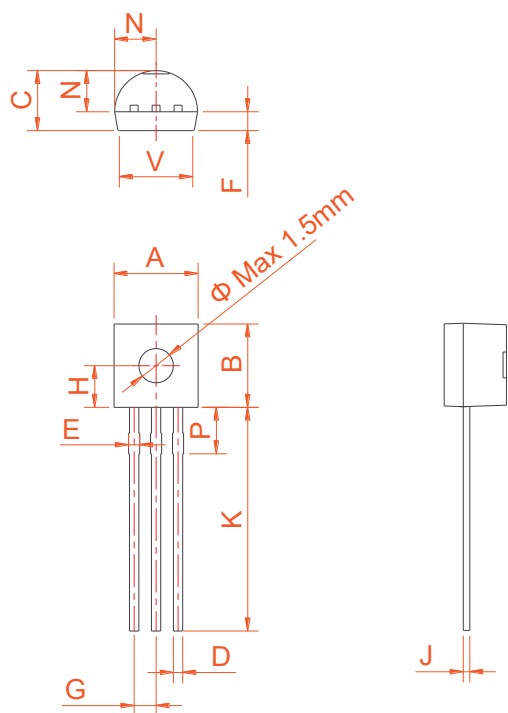
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.03		0.23	0.001		0.009
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
C	0.45		0.55	0.018		0.022
C2	2.70		2.90	0.106		0.114
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G	4.40		4.70	0.173		0.185
H	9.35		10.6	0.368		0.417
L1	1.30		1.70	0.051		0.067
L2	1.37		1.50	0.054		0.059
L3		0.8			0.031	
L4		0.8			0.031	
V1		4°			4°	
V2	0°		8°	0°		8°

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.90		1.20	0.035		0.047
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
B3	0.76		0.85	0.030		0.033
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G		2.30			0.091	
H	16.0		17.0	0.630		0.669
L	8.90		9.40	0.350		0.370
L1	1.80		1.90	0.071		0.075
L2	1.37		1.50	0.054		0.059
V1		4°			4°	



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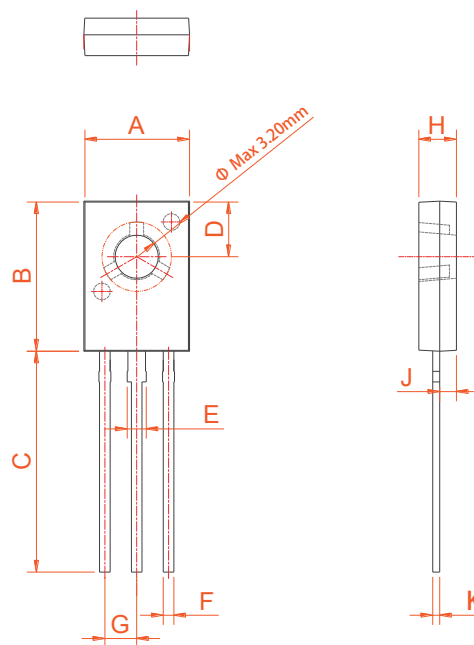
PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.45		5.20	0.175		0.205
B	4.32		5.33	0.170		0.210
C	3.18		4.19	0.125		0.165
D	0.407		0.533	0.016		0.021
E	0.60		0.80	0.024		0.031
F	-	1.1	-	-	0.043	-
G	-	1.27	-	-	0.050	-
H	-	2.30	-	-	0.091	-
J	0.36		0.50	0.014		0.020
K	12.70		15.0	0.500		0.591
N	2.04		2.66	0.080		0.105
P	1.86		2.06	0.073		0.081
V	-		4.3	-		0.169

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Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	7.40		7.80	0.291		0.307
B	10.6		11.2	0.417		0.441
C	15.3		16.3	0.602		0.642
D	3.90		4.10	0.154		0.161
E	1.17		1.47	0.046		0.058
F	0.66		0.86	0.026		0.034
G		2.29			0.090	
H	2.50		2.90	0.098		0.114
J	1.10		1.50	0.043		0.059
K	0.45		0.60	0.018		0.024



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