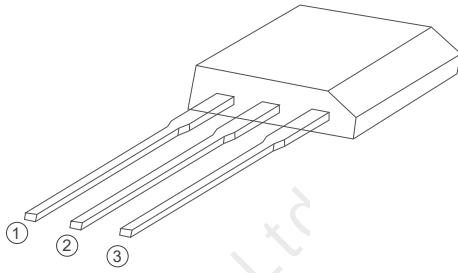


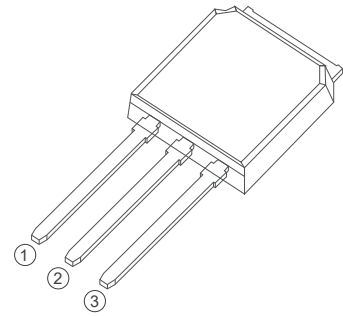
Z04 Series
4A TRIACs
4 Quadrants



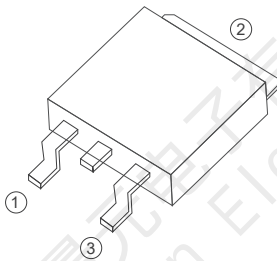
ShenZhenHanKingyuan
Electronic CO.,Ltd



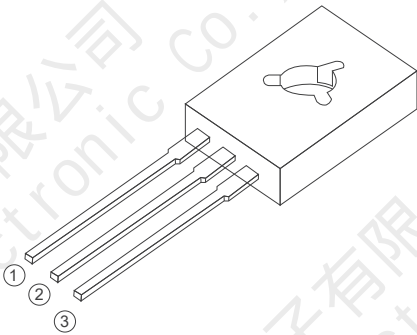
TO-202-3



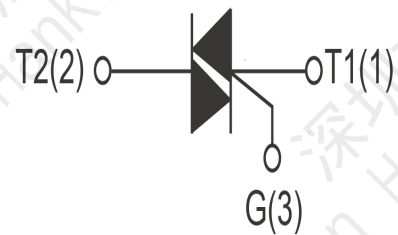
TO-251



TO-252



TO-126



FEATURES

> IT(RMS): 4A > VGT: 1.5V > VDRM VRRM:600V

APPLICATIONS

Washing machine,vacuums, massager,solid state relay, AC Motor speed regulation and so on.

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

Symbol	Parameter	Conditions	Ratings	Unit
VDRM VRRM	Repetitive Peak Off-State Voltage		600	V
IT(RMS)	R.M.S On-State Current	Tc=110°C	4	A
ITSM	Surge On-State Current	Tp=10ms/tp=16.7ms	20/21	A
I ² t	I ² t for fusing	Tp=10ms	2.2	A ² s
IGM	Peak Gate Current	Tj=150°C	1.2	A
PG(AV)	Average Gate Power Dissipation	Tj=125°C	0.2	W
Tj	Operating Junction Temperature		~40~125	°C
TSTG	Storage Temperature		~40~150	°C

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

Symbol	Parameter	Test Conditions	Value				Unit
			02	05	09	10	
IDRM	Repetitive Peak Off-State Current	Tj=25°C	≤5				uA
		Tj=125°C	≤0.5				mA
IRRM	Repetitive Peak Reverse Current	Tj=25°C	≤5				uA
		Tj=125°C	≤0.5				mA
IGT	Gate trigger current	I,II,III VD=12V IGT==0.1A	≤35	≤5	≤10	≤25	mA
VTM	Forward "on" voltage	IT=5A tp=380us	≤1.3				V
VGD	Gate non-trigger current	VD=VDRM,Tj=125°C	≥0.2				V
VGT	Gate trigger current	VD=12V	≤1.5				V
IH	Holding current	IT=0.2A	≤35	≤5	≤10	≤25	mA
di/dt	Critical-rate of rise of commutation current.	I,II,III IT=6A,IG=0.2A,DIG/Dt=0.2A/us	≥20				A ² /us
dv/dt	Critical-rate of rise of commutation voltage	TJ=125°C VD=2/3VDRM Gate	10	20	100	200	V/us
Rth(j-c)	Thermal resistance	Junction to case	15				°C/W

FIG1

Maximum power dissipation versus RMS on-state current

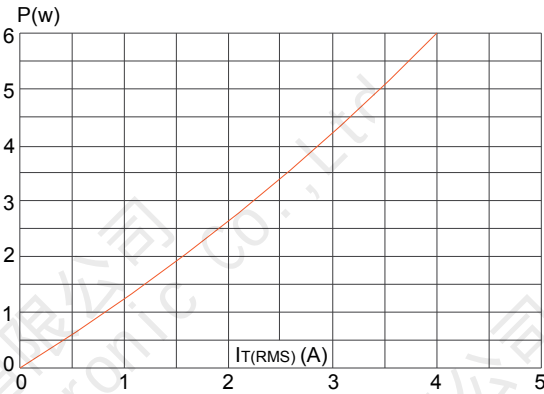


FIG2

RMS on-state current versus case temperature

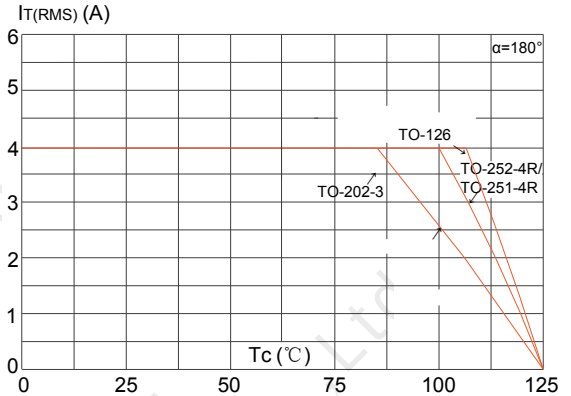


FIG3

Surge peak on-state current versus number of cycles

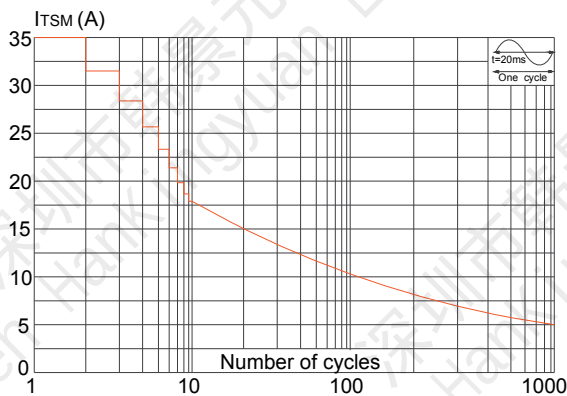


FIG4

On-state characteristics (maximum values)

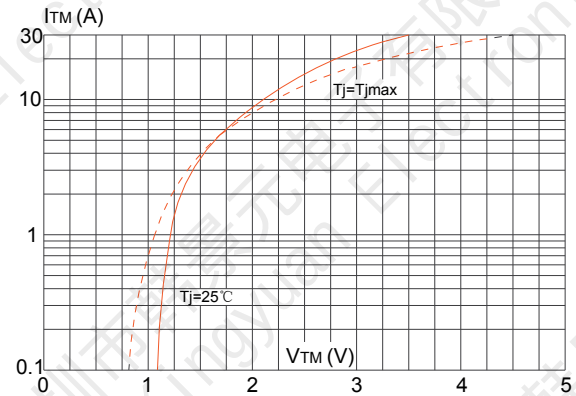


FIG5

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

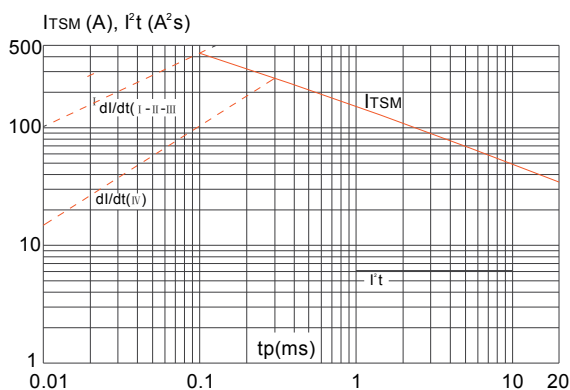
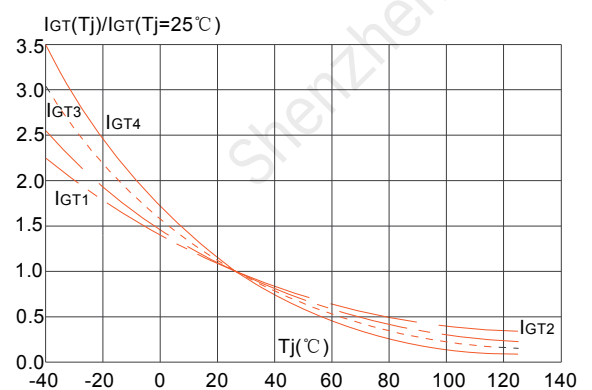
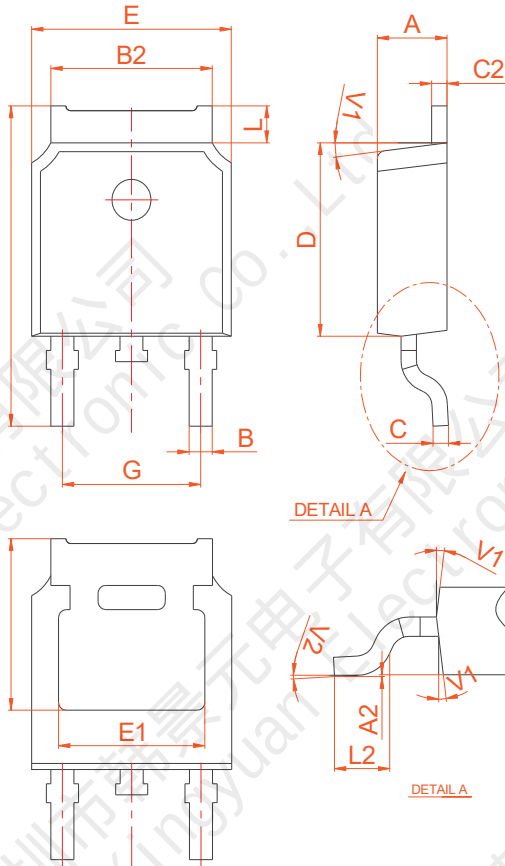


FIG6

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



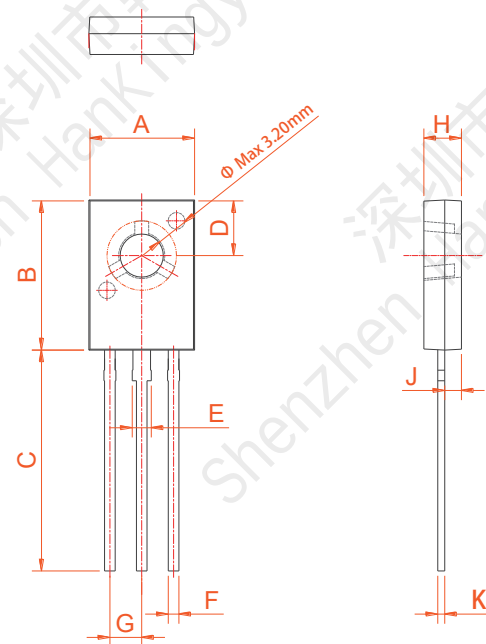
PACKAGE MECHANICAL DATA



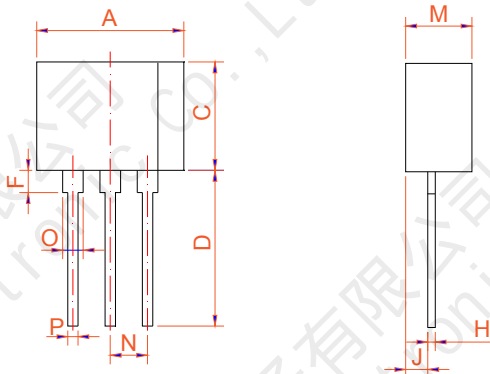
TO-252

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	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



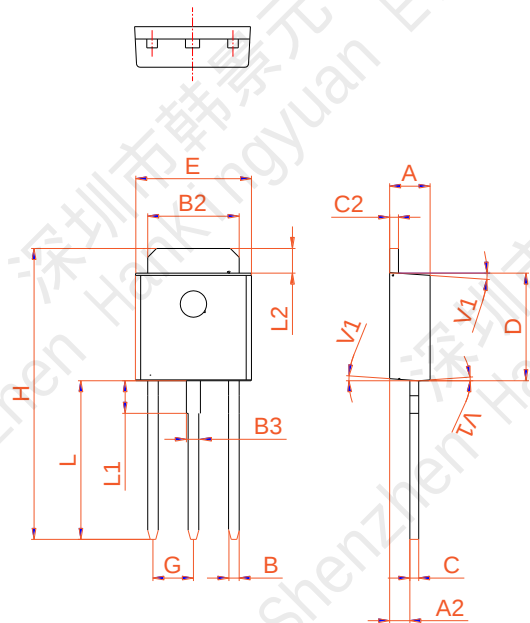
PACKAGE MECHANICAL DATA



TO-202-3

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.30		9.90	0.366		0.390
C	7.0		7.6	0.276		0.299
D	10.5		11.5	0.413		0.453
F	1.50		2.50	0.059		0.098
H	0.45		0.55	0.018		0.022
J	1.50		1.90	0.059		0.075
M	4.40		4.70	0.173		0.185
N		2.54			0.100	
O	1.20		1.50	0.047		0.059
P	0.60		0.80	0.024		0.031

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°	



TO-251



ShenZhenHanKingyuan
Electronic CO.,Ltd

Information furnished is believed to be accurate and reliable. However, Shenzhen HanKingyuan Electronic assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied.

The KY logo is a registered trademark of Shenzhen HanKingyuan Electronic.

©2013 Shenzhen HanKingyuan Electronic – Printed in Shenzhen – All Rights Reserved