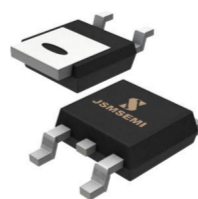


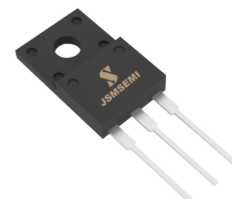
●产品特征和主要用途:

门极灵敏型硅单向器件;
具有自主知识产权的单面挖槽技术,
台面玻璃钝化工艺;
背面多层金属化电极;
具有较高的阻断电压和较高的温度稳定性;

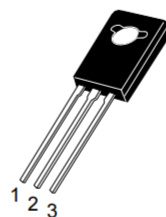
主要用于:吸尘器、电动工具等马达调速控制器;其它相控电路。



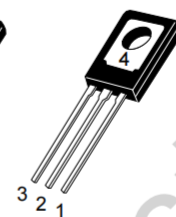
TO-220F



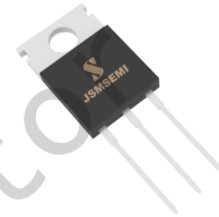
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●极限参数

符号	参数名称		数值	单位
$I_{T(RMS)}$	通态方均根电流	$T_j = -20 \sim 110^{\circ}\text{C}$	4	A
I_{TSM}	通态浪涌电流	$F=50\text{HZ}$ $t=20\text{ms}$	40	A
I^2t	I^2t 的极限值	$t_p=10\text{ms}$	16	A^2S
di/dt	通态电流临界上升率	$T_j=125^{\circ}\text{C}$	50	$\text{A}/\mu\text{s}$
V_{DRM}/V_{RRM}	断态重复峰值电压 反向重复峰值电压	$T_j = -20 \sim 125^{\circ}\text{C}$	600	V
I_{GM}	门极峰值电流	$t_p=20\mu\text{s}$ $T_j=125^{\circ}\text{C}$	4	A
$P_{G(AV)}$	门极平均耗散功率	$T_j=125^{\circ}\text{C}$	0.5	W

Tstg Tj	储存温度 有效结温	-40to+150 -40to+125	°C
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●电特性

符号	名称和测试条件	象 限		数值	单位
I _{GT}	触发电流 V _D =12V R _L =100 Ω	I	MAX	200	uA
V _{GT}				1.5	V
V _{GD}	不触发电压 T _j =125°C		MIN	0.2	V
I _H	维持电流 I _T =0.5A		MAX	200	uA
dv/dt	断态电压临界上升率 V _D =2/3V _{DRM} T _j =125°C		MIN	200	V/us
(dv/dt) _c	换向电压临界上升率 T _j =125°C		MIN	-	V/us

●静态参数

符号	名称和测试条件			数值	单位
V _{TM}	通态峰值电压 I _{TM} =8A	T _j =25°C	MAX	1.80	V
V _{T0}	门槛电压	T _j =125°C	MAX	0.92	V
R _d	斜率电阻	T _j =125°C	MAX	36.8	m Ω
I _{IDRM} I _{IRRM}	断态峰值电流 反向峰值电流	T _j =-20~125°C	MAX	5	uA
				1	mA
R _{th(j-c)}	结壳热阻			1.25	°C/W

●特性曲线

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

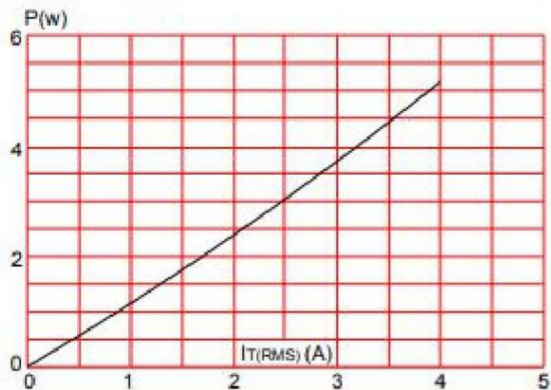


FIG.2: RMS on-state current versus case temperature

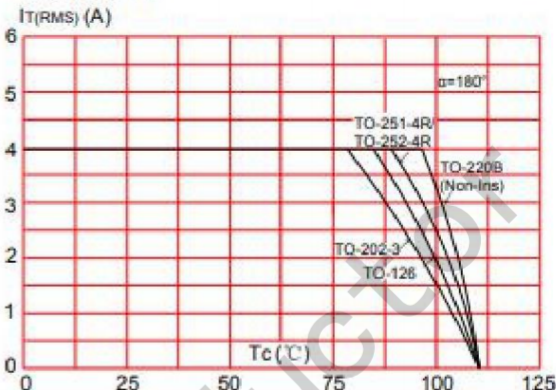


FIG.3: Surge peak on-state current versus number of cycles

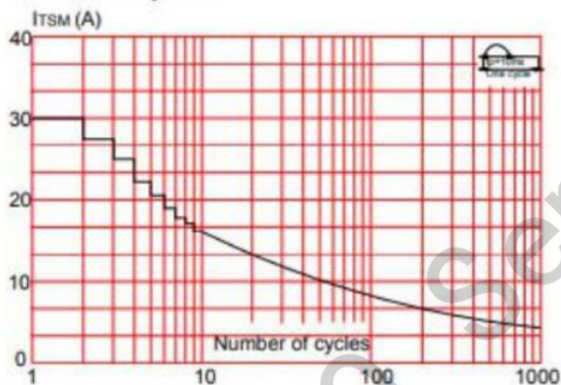


FIG.4: On-state characteristics (maximum values)

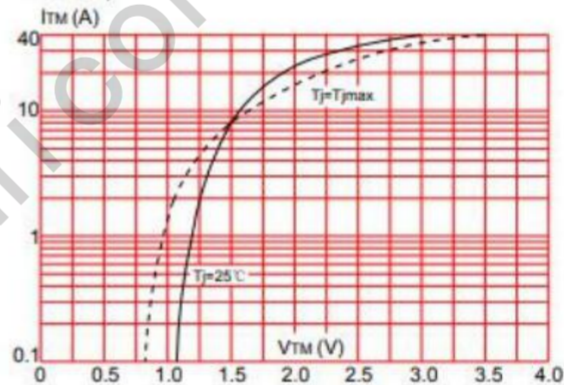


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 10\text{ms}$, and corresponding value of I^2t ($di/dt < 50\text{A}/\mu\text{s}$)

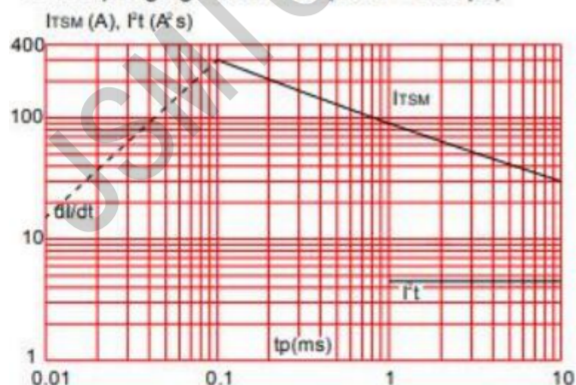
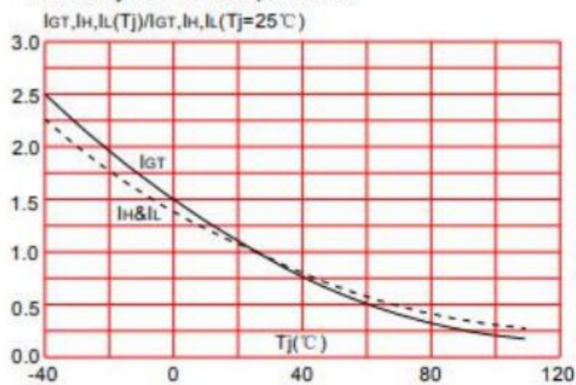
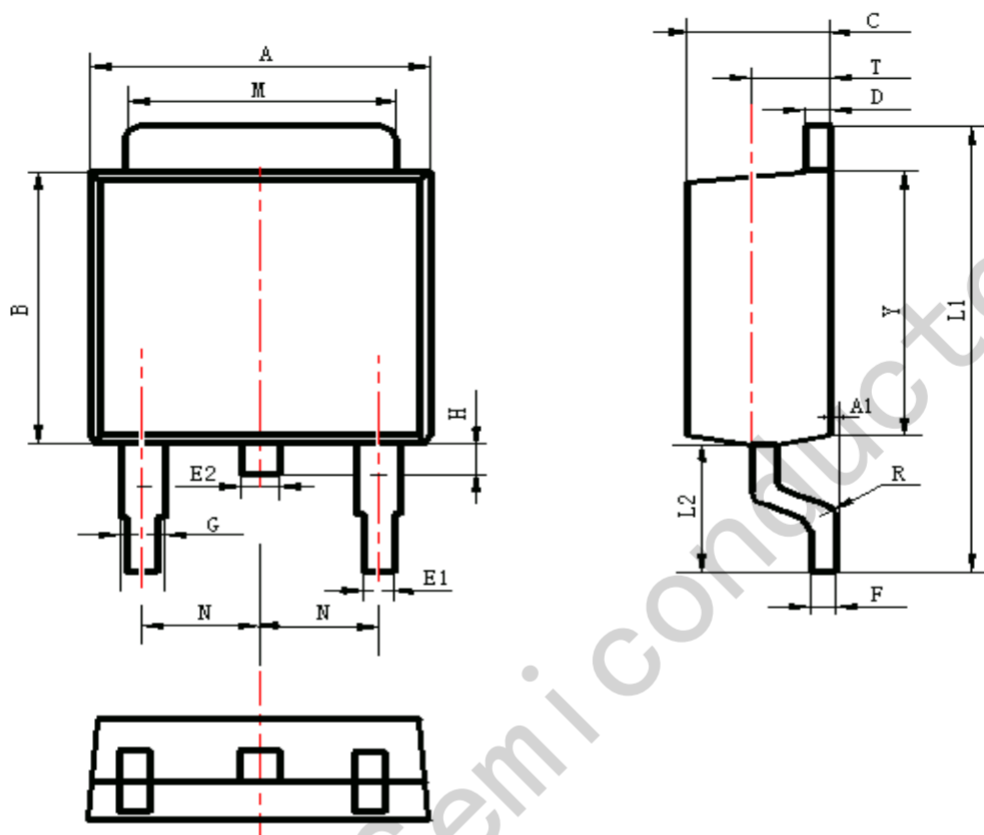


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



Package Information

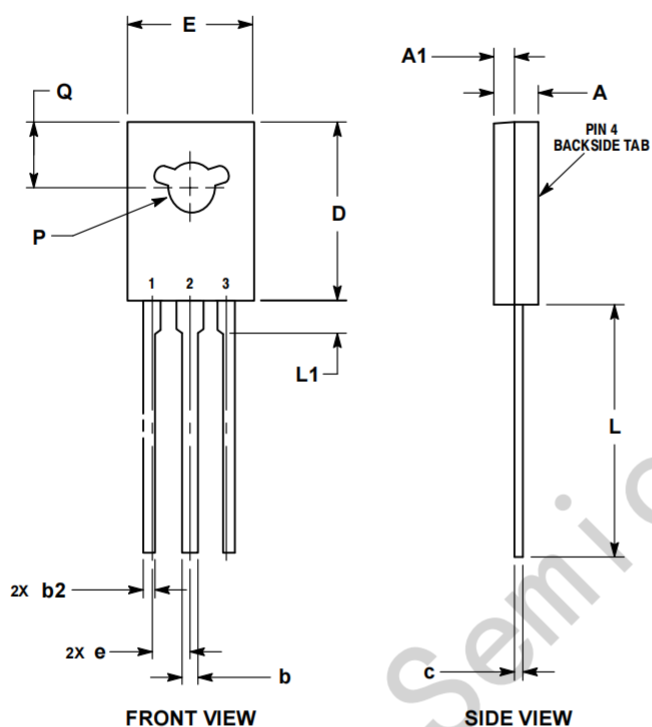
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Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	6.30	6.90	0.248	0.272
A1	0.00	0.16	0.000	0.006
B	5.70	6.30	0.224	0.248
C	2.10	2.50	0.083	0.098
D	0.30	0.70	0.012	0.028
E1	0.60	0.90	0.024	0.035
E2	0.70	1.00	0.028	0.039
F	0.30	0.60	0.012	0.024
G	0.70	1.20	0.028	0.047
L1	9.60	10.50	0.378	0.413
L2	2.70	3.10	0.106	0.122
H	0.40	1.00	0.016	0.039
M	5.10	5.50	0.201	0.217
N	2.09	2.49	0.082	0.098
R	0.30		0.012	
T	1.40	1.60	0.055	0.063
Y	5.10	6.30	0.201	0.248

Package Information

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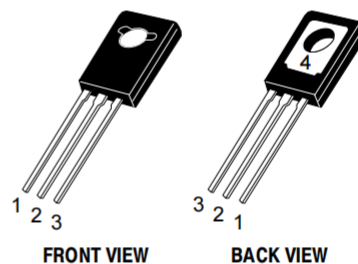
NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. NUMBER AND SHAPE OF LUGS OPTIONAL.

DIM	MIN	MAX
A	2.40	3.00
A1	1.00	1.50
b	0.60	0.90
b2	0.51	0.88
c	0.39	0.63
D	10.60	11.10
E	7.40	7.80
e	2.04	2.54
L	14.50	16.63
L1	1.27	2.54
P	2.90	3.30
Q	3.80	4.20

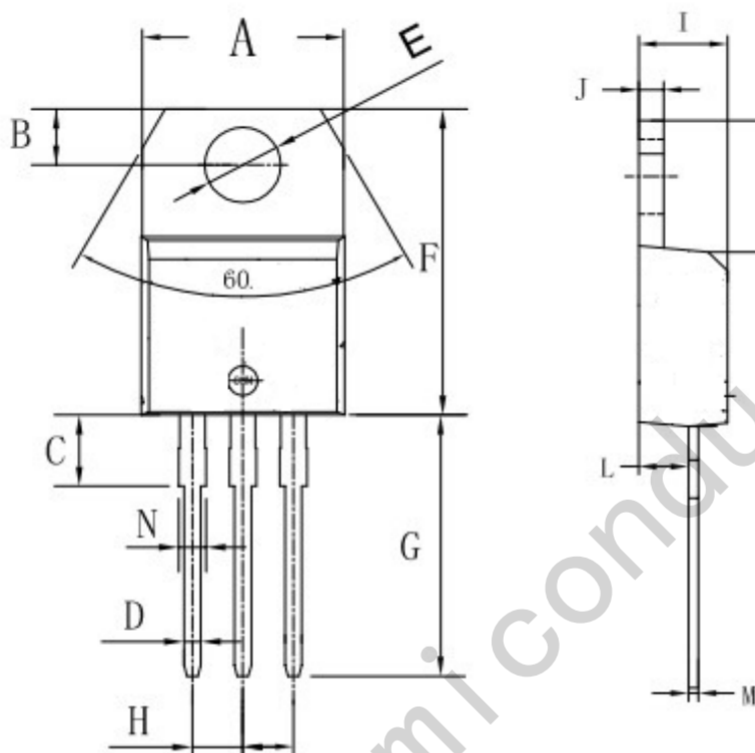
STYLE 1:

- PIN 1. EMITTER
2, 4. COLLECTOR
3. BASE



Package Information

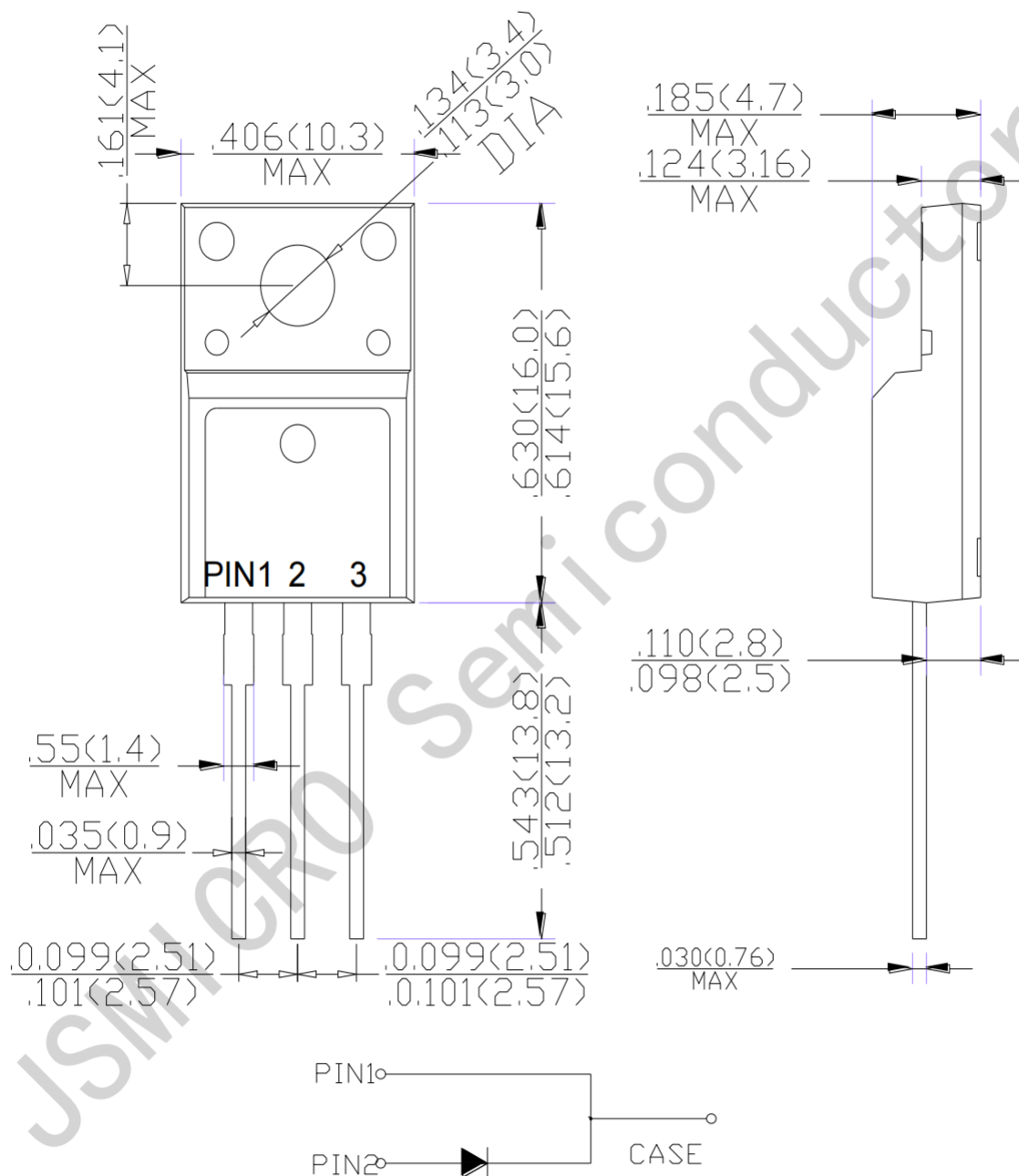
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Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	9.8	10.4	0.385	0.409
B	2.65	3.1	0.104	0.122
C	2.8	4.2	0.110	0.165
D	0.7	0.92	0.027	0.036
E	3.75	3.95	0.147	0.155
F	14.8	16.1	0.582	0.633
G	13.05	13.6	0.513	0.535
H	2.4	2.7	0.094	0.106
I	4.38	4.61	0.172	0.181
J	1.15	1.36	0.045	0.053
K	5.85	6.82	0.230	0.268
L	2.35	2.75	0.092	0.108
M	0.35	0.65	0.013	0.025
N	1.18	1.42	0.046	0.055

Package Information

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Dimensions in inches and (millimeters)