



绍兴怡华电子科技有限公司

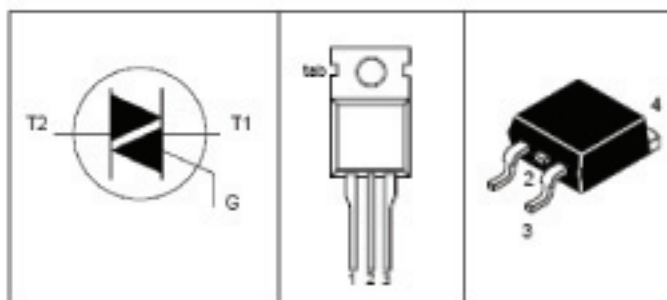
PART NAME : BT136

ISSUE DATE : 2010-03-13

Establishment : Carolyn

■ 主要特点:

符号	数值	单位
I_T (RMS)	4	A
V_{DRM}/V_{RRM}	600&800	V
IGT (Q1)	10	mA



■ 用途:

BT136 双向可控硅系列适用于一般交流开关电路,如:固态继电器,感应马达启动控制,调温控制,调光控制,调速控制...等.

■ 极限值:

符号	参数		数值	单位
$I_{T(RMS)}$	RMS 通态电流	$T_C=90^{\circ}C$	4	A
I_{TSM}	通态峰值浪涌电流	$F=50Hz, t=20ms$	27	A
I^2t	I^2t 耗散值	$T_r=10ms$	3.1	A^2s
di/dt	通态电流上升值	$F=120Hz, T_j=125^{\circ}C$	50	A/ μs
I_{GM}	门极峰值电流	$TP=20\mu s, T_j=125^{\circ}C$	2	A
$P_{G(AV)}$	平均门极耗散功率	$T_j=125^{\circ}C$	0.5	W

Tstg	贮存结温范围	-40+150	°C
Tj	工作结温范围	-40+125	°C

■ 电特性

参数名称	符号	规范值	单位	测试条件	
触发电流	I_{GT}	≤ 5	mA	$V_D=12V, I_T=0.1A$	T2+G+
		≤ 5	mA		T2+G-
		≤ 5	mA		T2-G-
		≤ 10	mA		T2-G+
触发电压	V_{GT}	≤ 1.5	V	$V_D=12V, I_T=0.1A$	
维持电流	I_H	≤ 10	mA	$V_D=12V, I_T=0.1A$	
电压上升率	dv/dt	≥ 50	V/ μ S	$V_D=67\%V_{DRM}$	
通态压降	V_{TM}	≤ 1.7	V	$I_T=5A$	
断态漏电流	I_{DRM}	≤ 0.5	mA	$V_D=V_{DRM}, T_j=125^\circ C$	

■ 热阻:

符号	参数	数值	单位
Rth(j-c)	Junction to case(AC)	3	°C/W
Rth(j-a)	Junction to ambient	60	°C/W

■ 特性曲线:

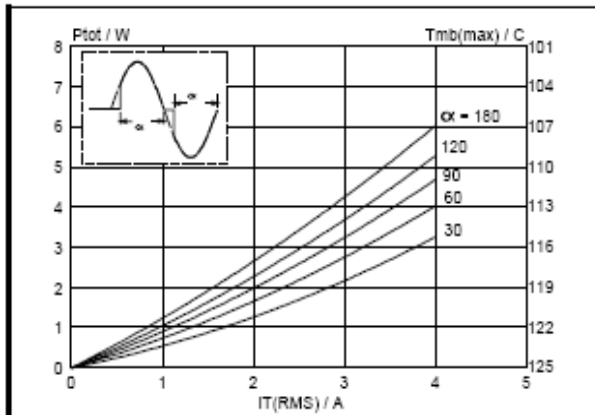


Fig. 1. Maximum on-state dissipation, P_{tot} , versus rms on-state current, $I_{T(RMS)}$, where α = conduction angle.

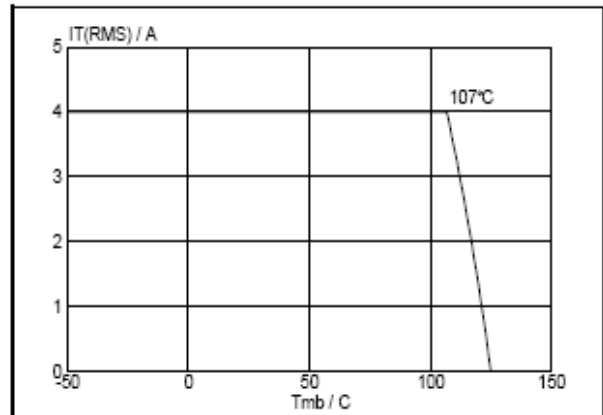


Fig. 4. Maximum permissible rms current $I_{T(RMS)}$, versus mounting base temperature T_{mb} .

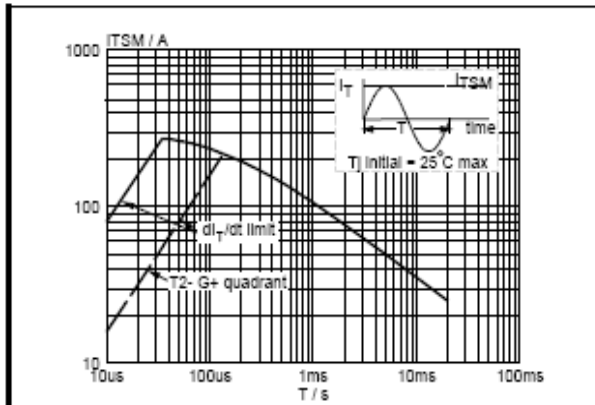


Fig. 2. Maximum permissible non-repetitive peak on-state current I_{TSM} , versus pulse width t_p , for sinusoidal currents, $t_p \leq 20ms$.

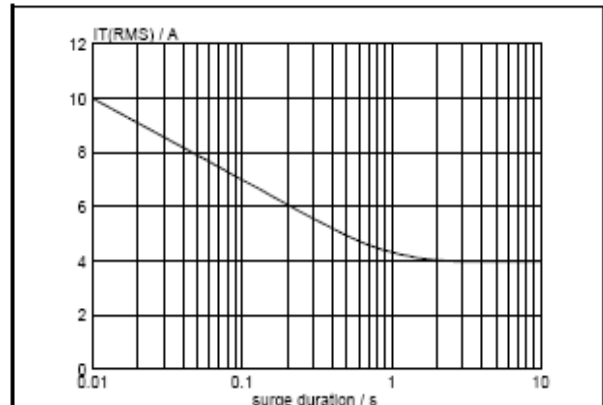


Fig. 5. Maximum permissible repetitive rms on-state current $I_{T(RMS)}$, versus surge duration, for sinusoidal currents, $f = 50 Hz$, $T_{mb} \leq 107^\circ C$.

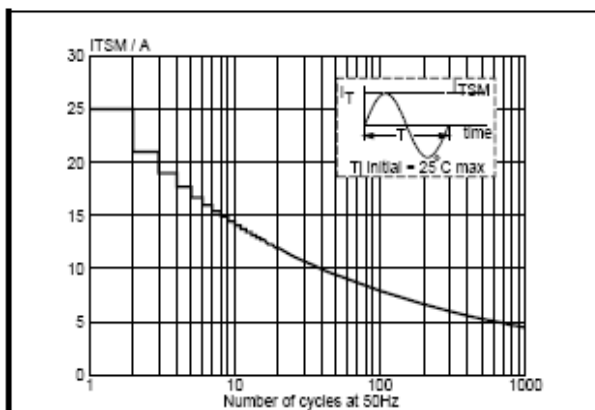


Fig. 3. Maximum permissible non-repetitive peak on-state current I_{TSM} , versus number of cycles, for sinusoidal currents, $f = 50 Hz$.

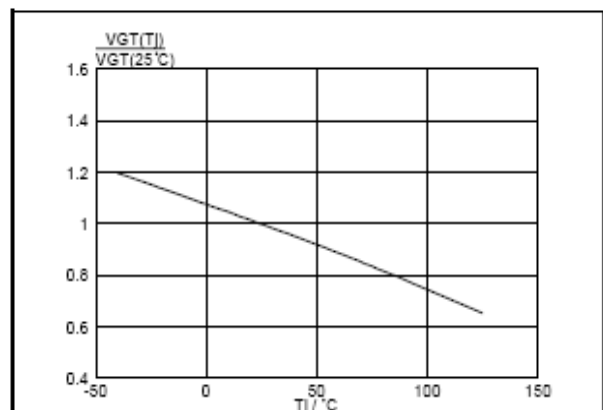
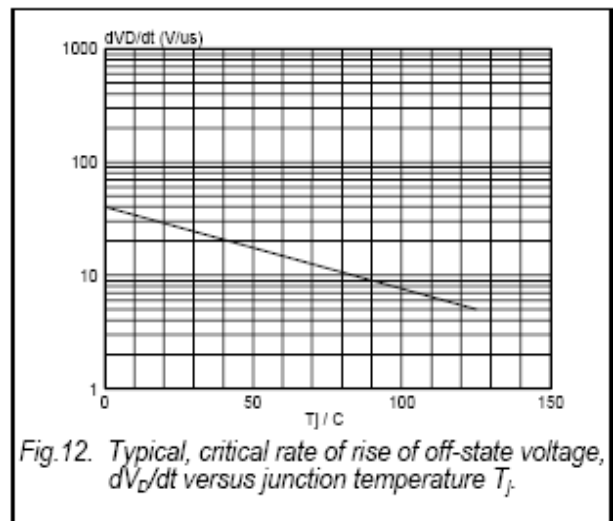
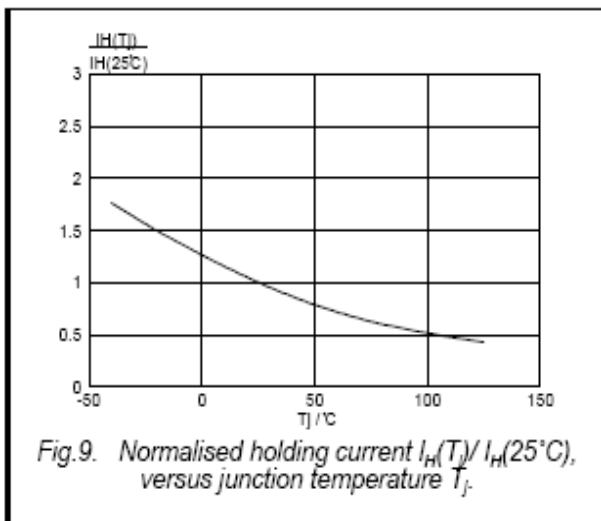
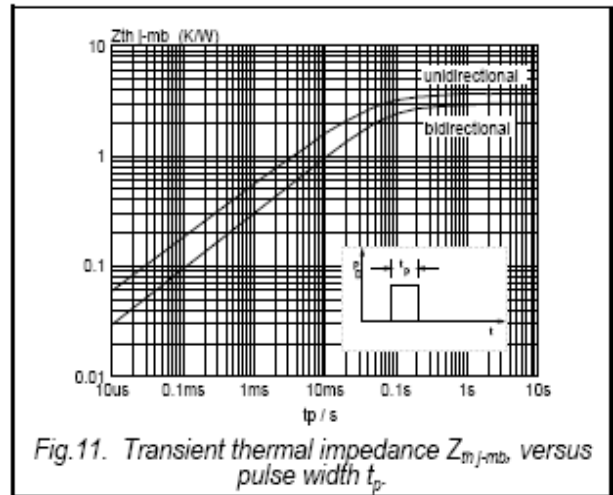
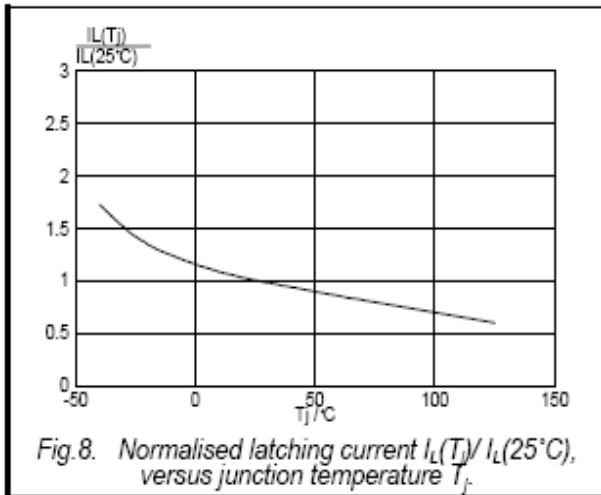
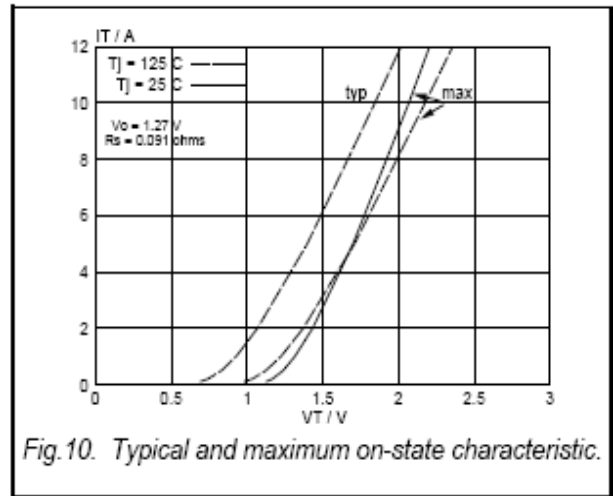
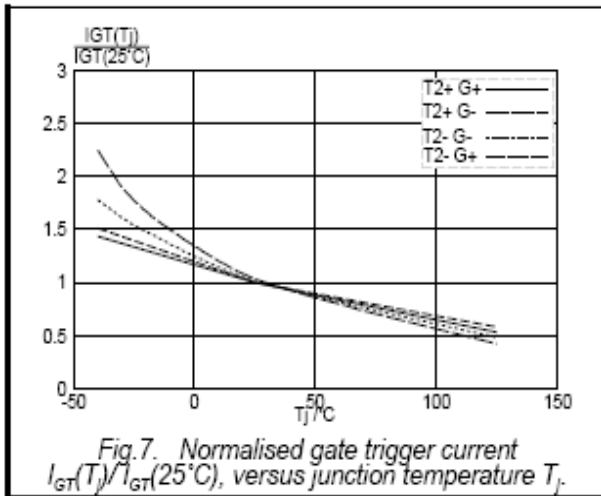


Fig. 6. Normalised gate trigger voltage $V_{GT}(T_J)/V_{GT}(25^\circ C)$, versus junction temperature T_J .

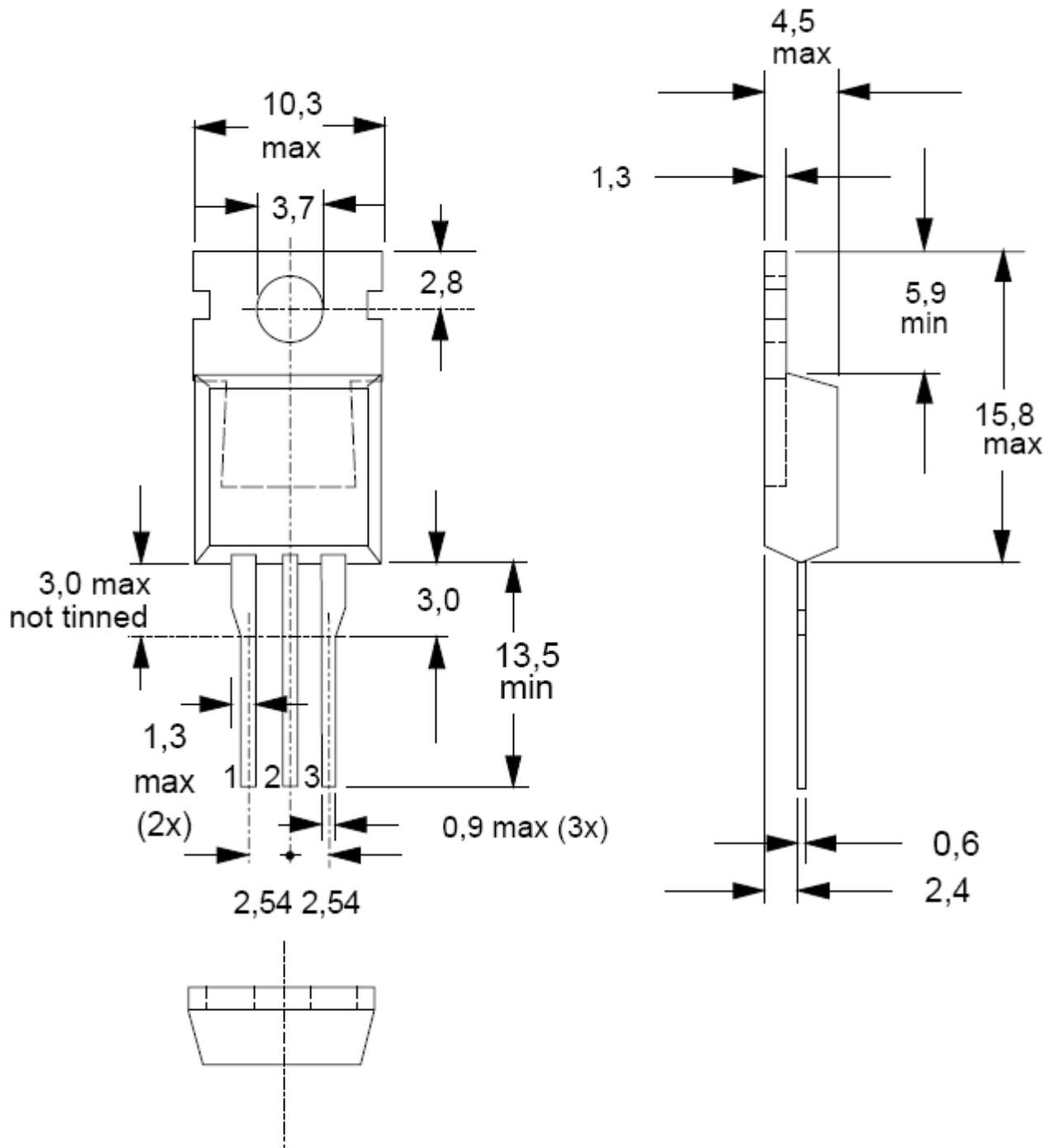
■ 特性曲线:



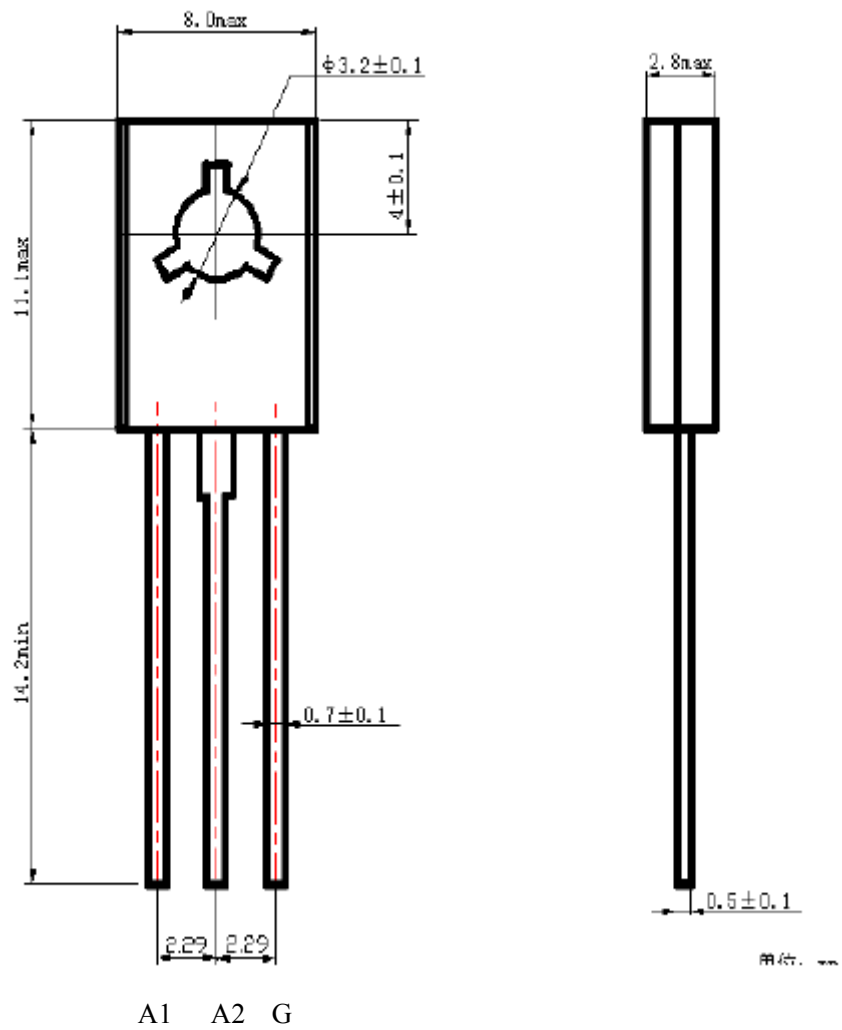
■ TO-220AB/TO220AB 外形尺寸

Dimensions in mm

Net Mass: 2 g

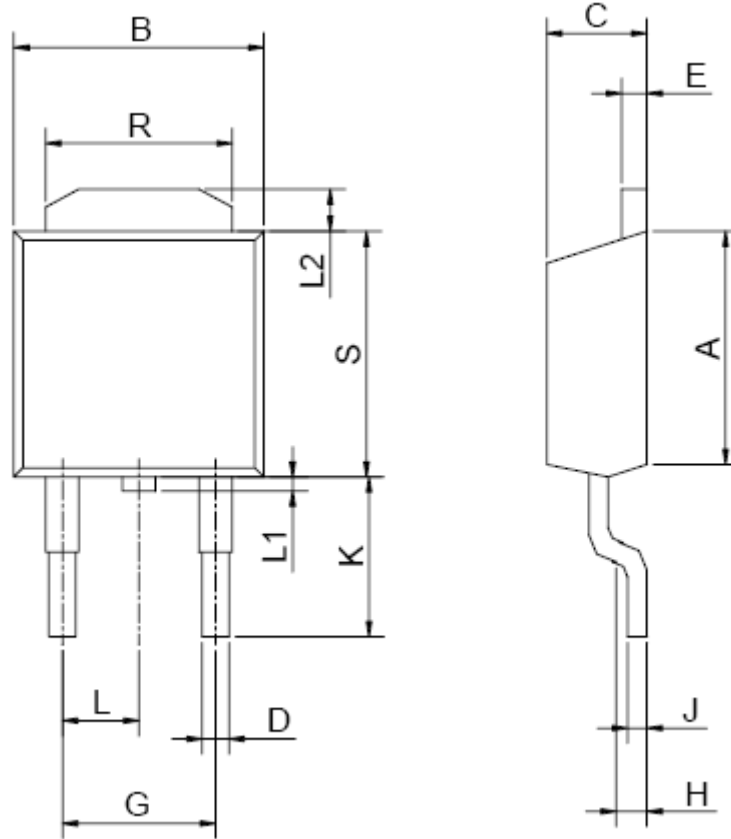


■ Mechanical Dimensions



■ Mechanical Dimensions

TO-252



SYMBOLS	DIMENSIONS IN MILLIMETERS			DIMENSIONS IN INCHS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	5.97	----	6.35	0.235	----	0.250
B	6.35	----	6.73	0.250	----	0.265
C	2.19	----	2.38	0.086	----	0.094
D	0.69	----	0.88	0.027	----	0.035
E	0.46	----	0.58	0.018	----	0.023
G	4.58BSC			0.180BSC		
H	0.87	----	1.01	0.034	----	0.040
J	0.46	----	0.58	0.018	----	0.023
K	2.60	----	2.89	0.102	----	0.114
L	2.29BSC			0.090BSC		
R	4.45	----	5.46	0.175	----	0.215
S	5.33	----	5.59	0.210	----	0.220
L1	0.64	----	1.02	0.025	----	0.040
L2	1.52	----	2.03	0.060	----	0.080