

NPN MJE 系列晶体管/ MJE NPN SERIES TRANSISTORS

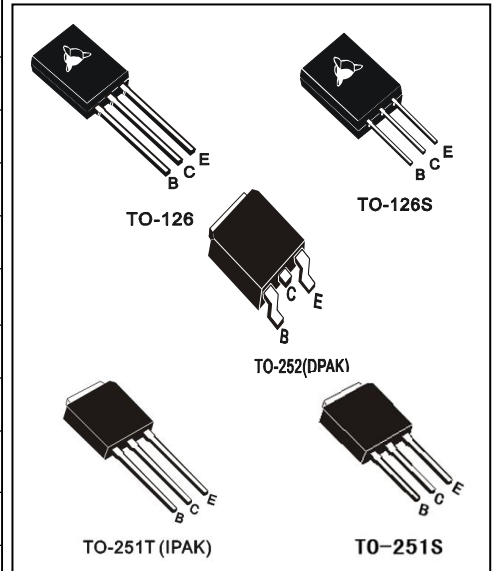
MJE13002AHT

- 特点: 耐压高 开关速度快 安全工作区宽 符合 RoHS 规范
- FEATURES: ■HIGH VOLTAGE CAPABILITY ■HIGH SPEED SWITCHING ■WIDE SOA ■RoHS COMPLIANT
- 应用: 充电器 节能灯 电子镇流器
- APPLICATION: ■RECHARGER ■FLUORESCENT LAMP ■ELECTRONIC BALLAST

●最大额定值 (Ta=25°C)

●Absolute Maximum Ratings (Ta=25°C) TO-126/126S/251T/251S/252

参数 PARAMETER	符号 SYMBOL	额定值 VALUE	单位 UNIT
集电极-基极电压 Collector-Base Voltage	V _{CB0}	850	V
集电极-发射极电压 Collector-Emitter Voltage	V _{CEO}	480	V
集电极-发射极电压 Emitter- Base Voltage	V _{EBO}	9.0	V
基极电流 Base Current	I _b	0.75	A
基极峰值电流 Base Peak Current	I _{bm}	1.5	A
集电极电流 Collector Current	I _c	1.5	A
集电极峰值电流 Collector Peak Current	I _{cm}	3.0	A
集电极耗散功率 Total Power Dissipation	P _{tot}	TO-126/126S:1.2 TO-251T/251S/252:1.2	W
最高工作温度 Junction Temperature	T _j	150	°C
贮存温度 Storage Temperature	T _{stg}	-65-150	°C



●电特性 (Ta=25°C) ●Electronic Characteristics (Ta=25°C)

参数名称 CHARACTERISTICS	符号 SYMBOL	测试条件 TEST CONDITION	最小值 MIN	最大值 MAX	单位 UNIT
集电极-基极截止电流 Collector-Base Cutoff Current	I _{CB0}	V _{CB} =850V		100	μA
集电极-发射极截止电流 Collector-Emitter Cutoff Current	I _{CEO}	V _{CE} =480V, I _B =0		250	μA
集电极-基极电压 Collector-Base Voltage	V _{CB0}	I _C =1mA, I _E =0	850		V
集电极-发射极电压 Collector-Emitter Voltage	V _{CEO}	I _C =10mA, I _B =0	480		V
发射极-基极电压 Emitter- Base Voltage	V _{EBO}	I _E =1mA, I _C =0	9		V
集电极-发射极饱和电压 Collector-Emitter Saturation Voltage	V _{cesat}	I _C =0.5A, I _B =0.1A		0.5	V
		I _C =1.5A, I _B =0.5A		1.5	V
发射极-基极饱和电压 Base-Emitter Saturation Voltage	V _{besat}	I _C =0.5A, I _B =0.1A		1.2	V
		V _{CE} =5V, I _C =10mA	7		
		V _{CE} =5V, I _C =100mA	20	35	
电流放大倍数 DC Current Gain	h _{FE}	V _{CE} =5V, I _C =1.0A	6		
		V _{CE} =5V, I _C =10mA	7		
		V _{CE} =5V, I _C =100mA	20	35	
内置二极管正向压降/Diode Forward Voltage	V _F	I _F =0.8A		2.0	V

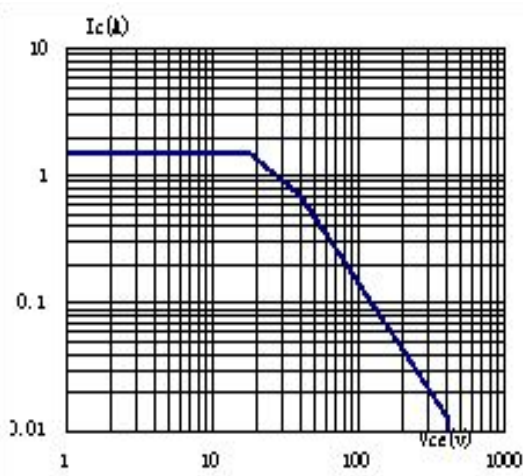
●订单信息/ORDERING INFORMATION:

包装形式/PACKING	订货编码/ORDERING CODE	
	普通塑封料 Normal Package Material	无卤塑封料 Halogen Free
TO-126 普通袋装/NORMAL PACKING	MJE13002AHT TO-126	MJE13002AHT TO-126-HF
TO-126S 普通袋装/NORMAL PACKING	MJE13002AHT TO-126S	MJE13002AHT TO-126S-HF
TO-251T 或 251S 普通袋装/NORMAL PACKING	MJE13002AHT TO-251T 或 251S	MJE13002AHT TO-251T 或 251S-HF
TO-251T 或 251S 条管/NORMAL PACKING	MJE13002AHT TO-251T 或 251S-TU	MJE13002AHT TO-251T 或 251S-TU-HF
TO-252 条管/NORMAL PACKING	MJE13002AHT TO-252-TU	MJE13002AHT TO-252-TU-HF
TO-252 编带装/AMMOPACK	MJE13002AHT TO-252-TR	MJE13002AHT TO252-TR-HF

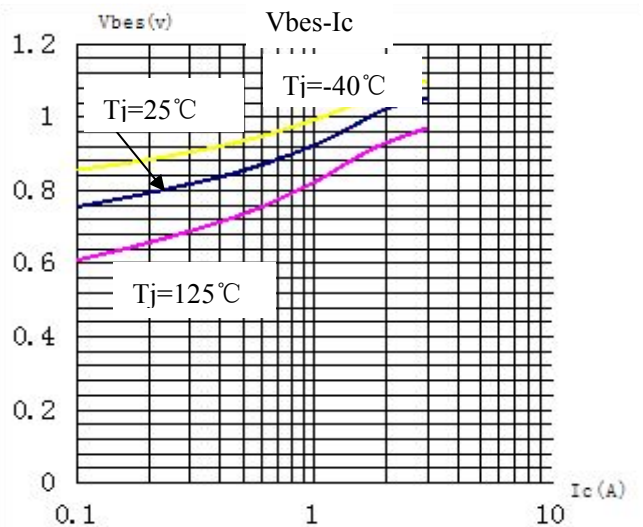
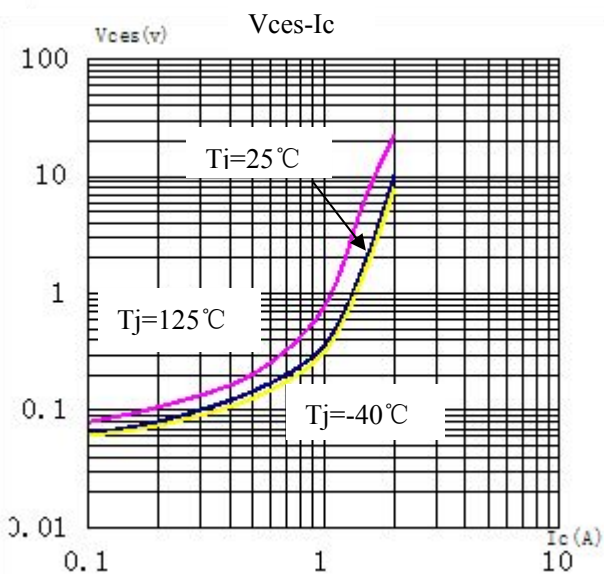
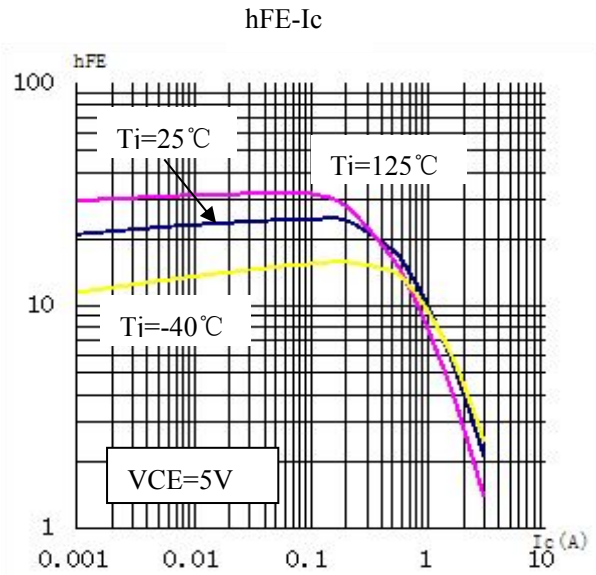
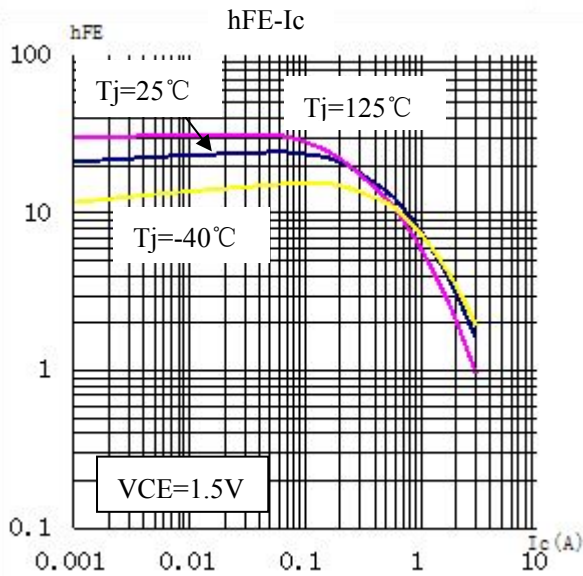
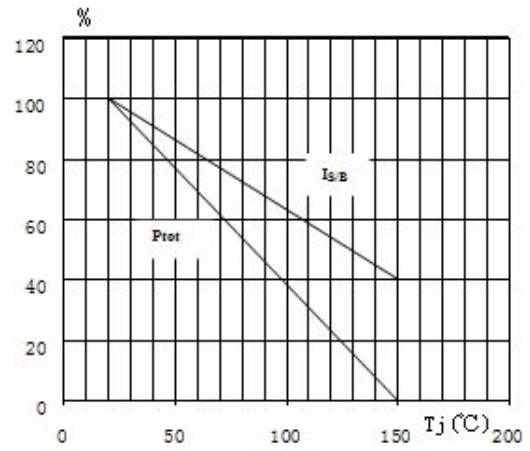
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MJE13002AHT

SOA(CD)



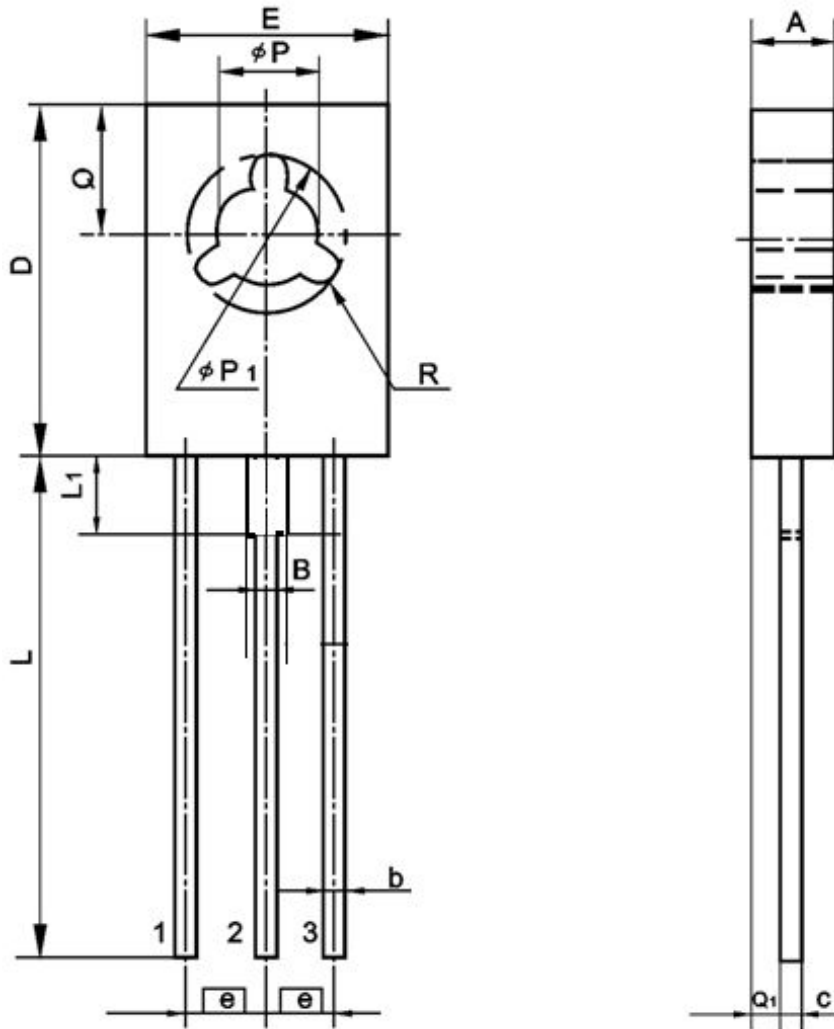
$P_{tot} \propto T_j$



TO-126 封装机械尺寸 TO-126 MECHANICAL DATA

单位:毫米/UNIT: mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	2.30		2.80	L	15.00		16.50
B	1.15		1.42	L1	1.50		2.54
b	0.65		0.90	ϕP	2.90		3.60
c	0.35		0.65	$\phi P1$		5.00	
D	10.50		11.10	Q	3.60		4.40
E	7.20		7.80	Q1	0.90		1.50
e		2.29		R		0.50	

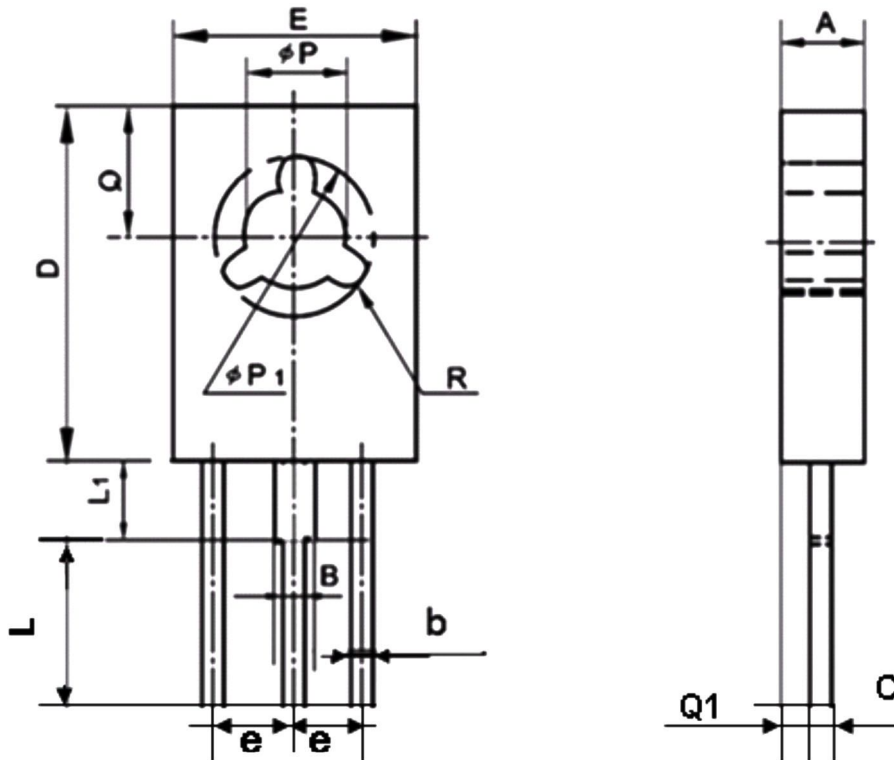




TO-126S 封装机械尺寸 TO-126S MECHANICAL DATA

单位:毫米/UNIT: mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A	2.30		2.80	L	3.20		3.80
B	1.15		1.42	L1	1.50		2.54
b	0.65		0.90	ϕP	2.90		3.60
c	0.35		0.65	$\phi P1$		5.00	
D	10.50		11.10	Q	3.60		4.40
E	7.20		7.80	Q1	0.90		1.50
e		2.29		R		0.50	

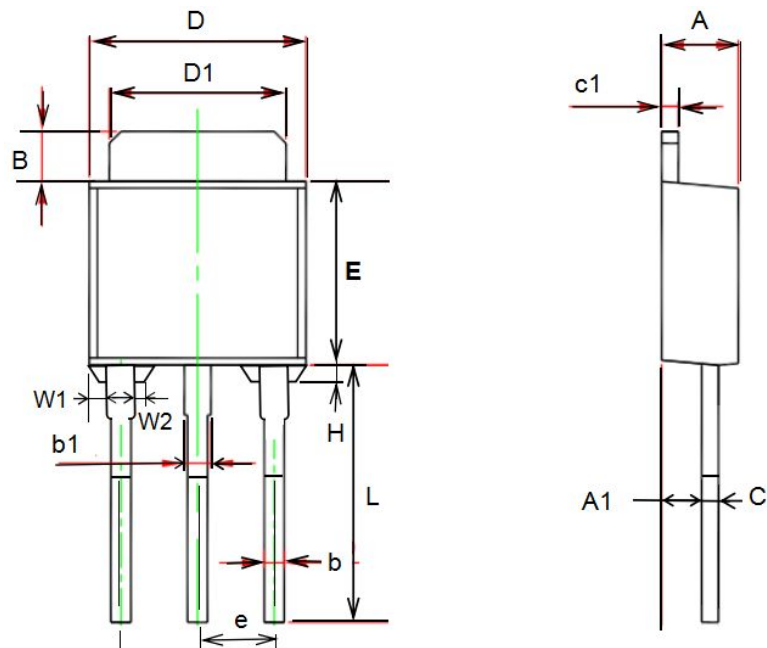


TO-251T 封装机械尺寸 TO-251T (IPAK) MECHANICAL DATA

单位:毫米/UNIT: mm

符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	2.10		2.50
A ₁	0.95		1.30
B	0.80		1.25
b	0.50		0.80
b ₁	0.70		0.80
c	0.45		0.70
c ₁	0.45		0.70
D	6.35		6.80
D ₁	5.10		5.50
E	5.30		6.30
e	2.25	2.30	2.35
L	7.00		9.20
H	0.35		0.45
W1	0.30		0.50
W2	0.20		0.40

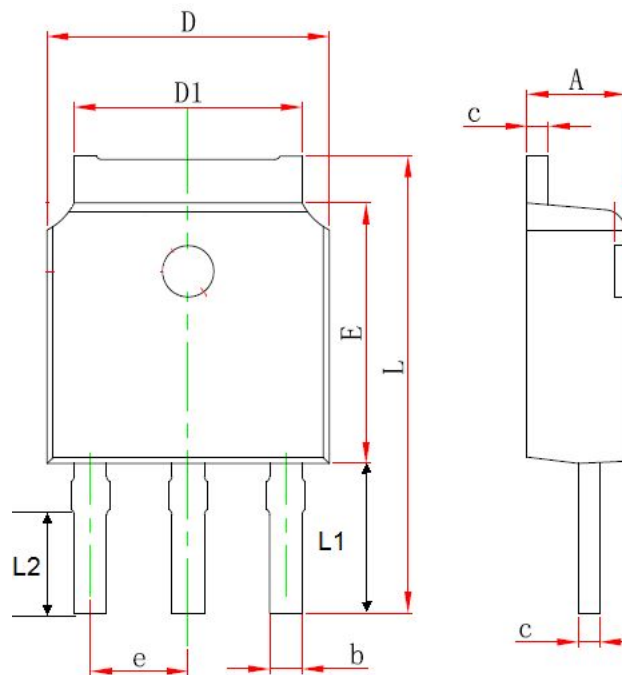
[S/L]



TO-251S 封装机械尺寸 TO-251S (IPAK) MECHANICAL DATA

单位:毫米/UNIT: mm

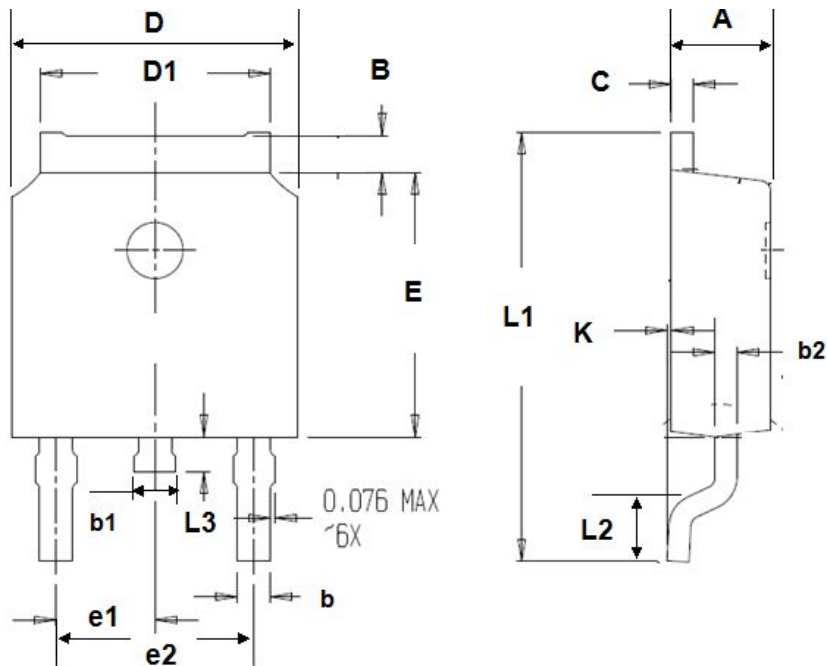
符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	2.20		2.40
b	0.50		0.85
C	0.45	0.50	0.60
D	6.50		6.70
D1	5.10		5.50
E	5.9		6.20
e	2.18	2.29	2.38
L	11.00		12.40
L1	4.8		5.3
L2	3.5		4.2



TO-252 封装机械尺寸 TO-252 MECHANICAL DATA

单位:毫米/UNIT: mm

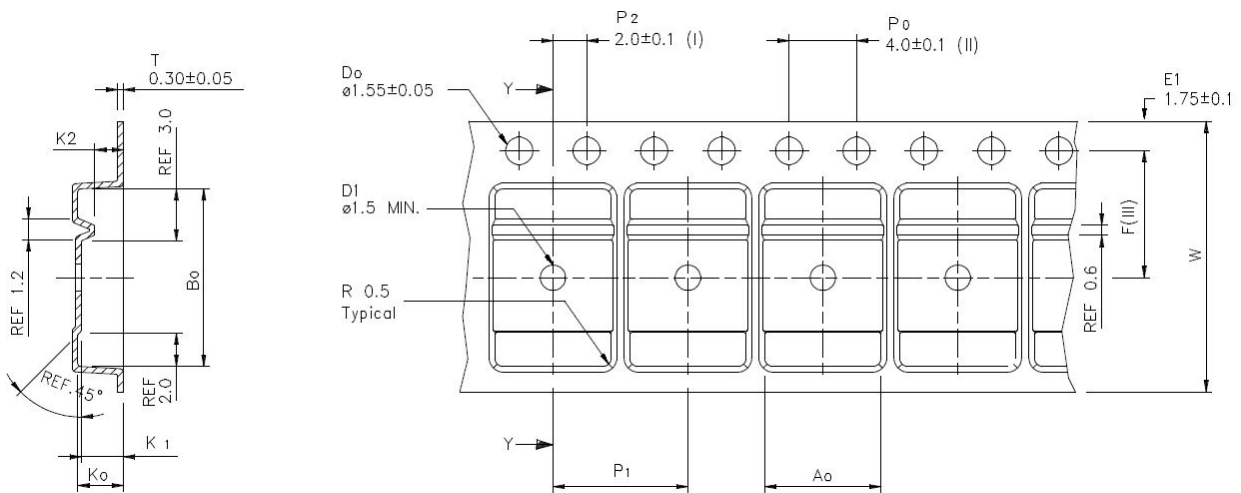
符号 SYMBOL	最小值 min	最大值 max	符号 SYMBOL	最小值 min	最大值 max
A	2.10	2.50	B	0.85	1.25
b	0.50	0.80	b1	0.70	1.20
b2	0.45	0.70	C	0.45	0.70
D	6.30	6.75	D1	5.10	5.50
E	5.30	6.30	e1	2.25	2.35
L1	9.20	10.60	e2	4.45	4.75
L2	0.90	1.75	L3	0.60	1.10
K	0.00	0.23			



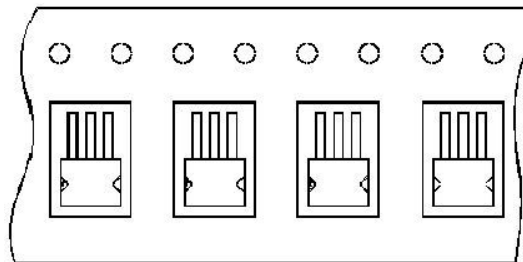
TO-252 编带规格尺寸 TO-252 TAPE AND REEL DATA

单位:毫米/UNIT: mm

符号 SYMBOL	最小值 min	典型值 nom	最大值 max	符号 SYMBOL	最小值 min	典型值 nom	最大值 max
A0	6.80	6.90	7.00	B0	10.40	10.50	10.60
K0	2.60	2.70	2.90	K1	2.40	2.50	2.60
F	7.40	7.50	7.60	K2	1.60	1.70	1.80
W	15.90	16.00	16.10	P1	7.90	8.00	8.10



使用供带方向/USER DIRECTION OF FEED



编带器件定位/UNIT ORIENTATION