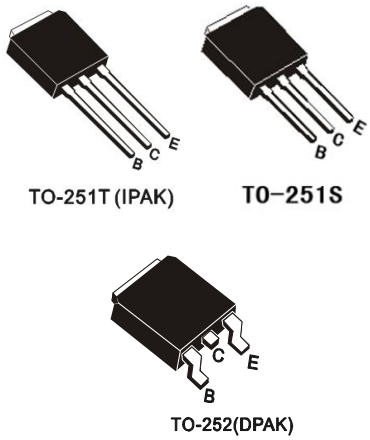
MJE NPN 系列晶体管/ MJE NPN SERIES TRANSISTORS MJE13003HT

●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）

参数 PARAMETER	符号 SYMBOL	额定值 VALUE	单位 UNIT
集电极-基极电压 Collector-Base Voltage	V_{CBO}	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	1.0	A
基极峰值电流 Base Peak Current	I_{bm}	2.0	A
集电极电流 Collector Current	I_C	2.0	A
集电极峰值电流 Collector Peak Current	I_{cm}	4.0	A
集电极耗散功率 Total Power Dissipation	P_{tot}	1.0	W
最高工作温度 Junction Temperature	Tj	150	°C
贮存温度 Storage Temperature	Tstg	-65-150	°C

TO-251T/251S/252



●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_{CBO}	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_{CBO}	IC=1mA,IE=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	Vcesat	I_C=0.5A,I_B=0.1A		0.5	V
		I_C=1.5A,I_B=0.3A		1.2	V
发射极-基极饱和电压 Base-Emitter Saturation Voltage	Vbesat	I_C=0.5A,I_B=0.1A		1.0	V
电流放大倍数 DC Current Gain	h_{FE}	V_{CE}=5V,I_C=10mA	7		
		V_{CE}=5V,I_C=100mA	20	35	
		V_{CE}=5V,I_C=2A	4		

●订单信息/ORDERING INFORMATION:

包装形式/PACKING	订货编码/ORDERING CODE	
	普通塑封料 Nornal Package Material	无卤塑封料 Halogen Free
TO-251T 或 251S 普通袋装 NORMAL PACKING	MJE13003HT TO-251T 或 251S	MJE13003HT TO-251T-HF
TO-252 或 251S 条管/NORMAL PACKING	MJE13003HT TO-251T 或 TO-251S-TU	MJE13003HT TO-251T 或 TO-251S-TU-HF
TO-252 条管/NORMAL PACKING	MJE13003HT TO-252-TU	MJE13003HT TO-252-TU-HF
TO-252 编带装/AMMOPACK	MJE13003HT TO-252-TR	MJE13003HT TO252-TR-HF

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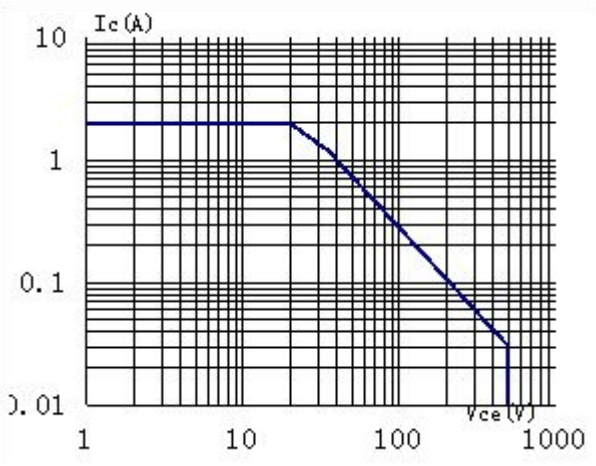
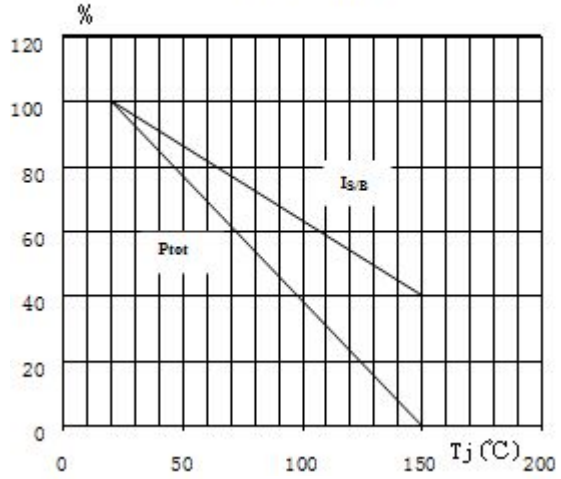
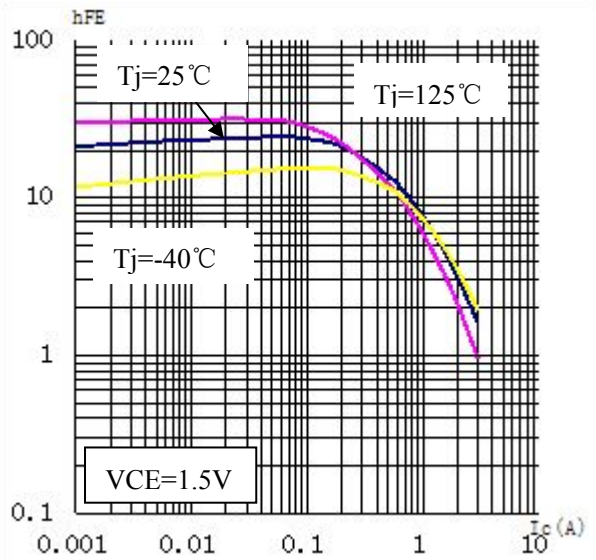
SOA(CD)



Ptot∝Tj



hFE-Ic



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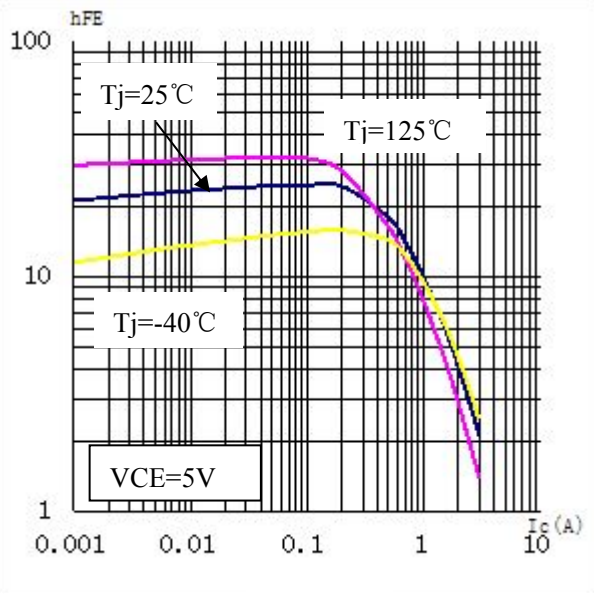

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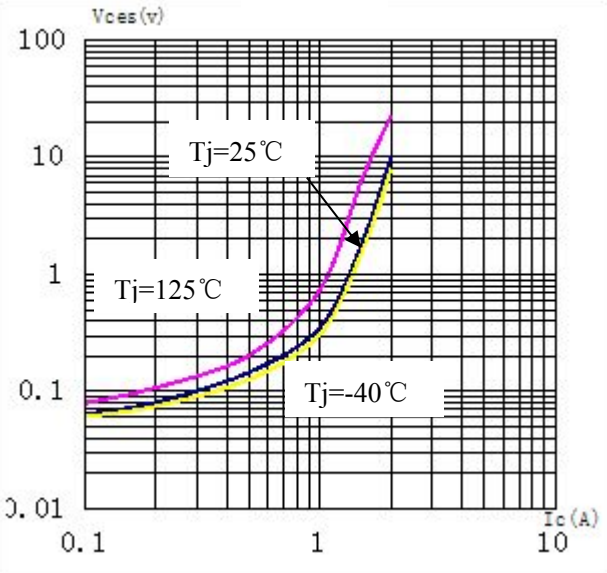

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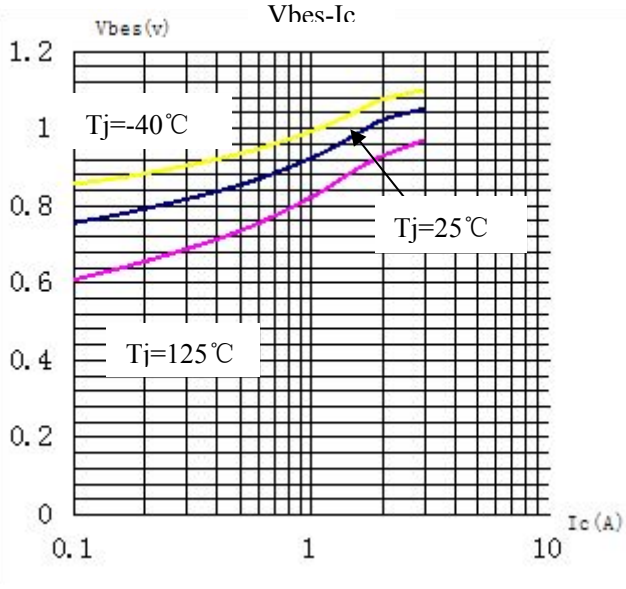
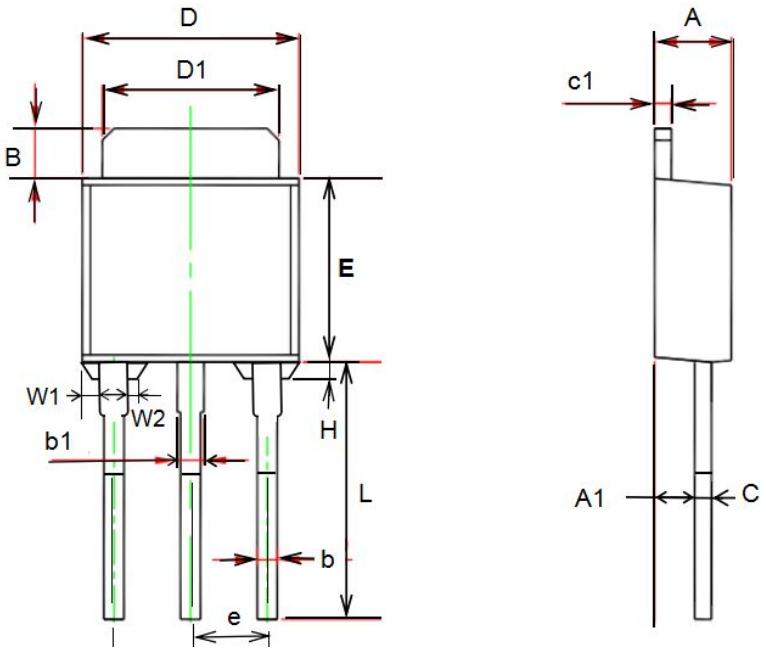


TO-251T 封装机械尺寸
TO-251T (IPAK) MECHANICAL DATA

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
c1	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

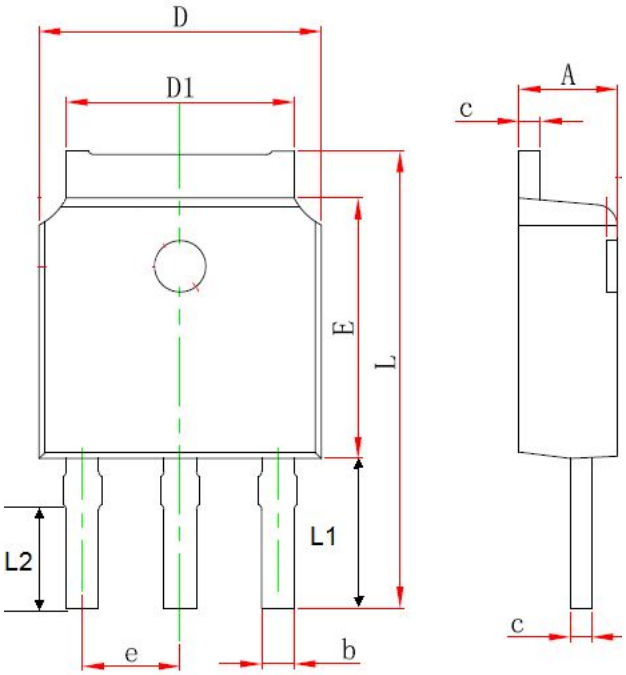
[S/L]



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

单位:毫米/UNIT：mm

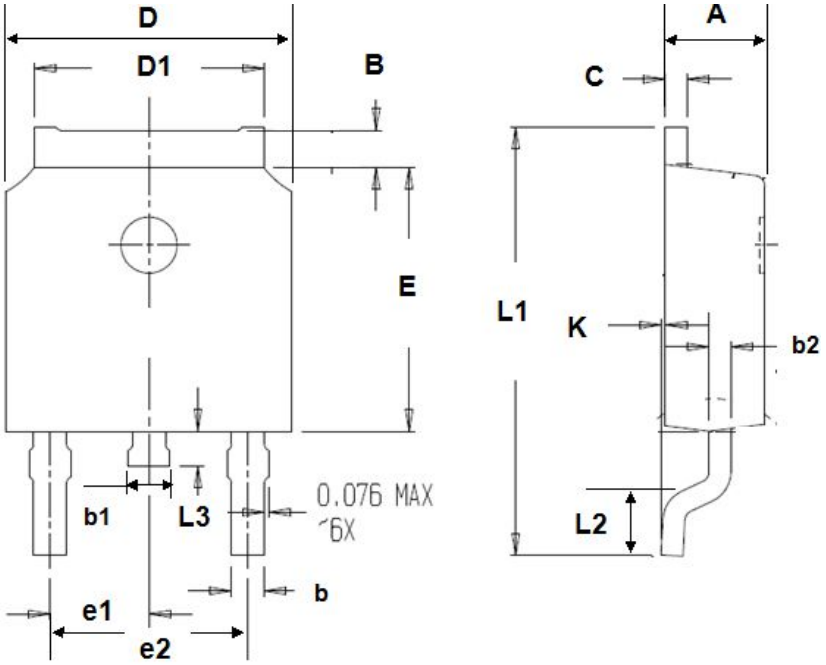
符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	2.20		2.40
b	0.50		0.85
C	0.45	0.50	0.60
D	6.50		6.70
D1	5.10		5.50
E	5.9		6.20
e	2.18	2.29	2.38
L	11.00		12.40
L1	4.8		5.3
L2	3.5		4.2



TO-252 封装机械尺寸
TO-252 MECHANICAL DATA

单位:毫米/UNIT：mm

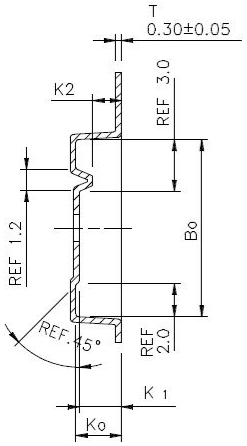
符号 SYMBOL	最小值 min	最大值 max	符号 SYMBOL	最小值 min	最大值 max
A	2.10	2.50	B	0.85	1.25
b	0.50	0.80	b1	0.70	1.20
b2	0.45	0.70	C	0.45	0.70
D	6.30	6.75	D1	5.10	5.50
E	5.30	6.30	e1	2.25	2.35
L1	9.20	10.60	e2	4.45	4.75
L2	0.90	1.75	L3	0.60	1.10
K	0.00	0.23			

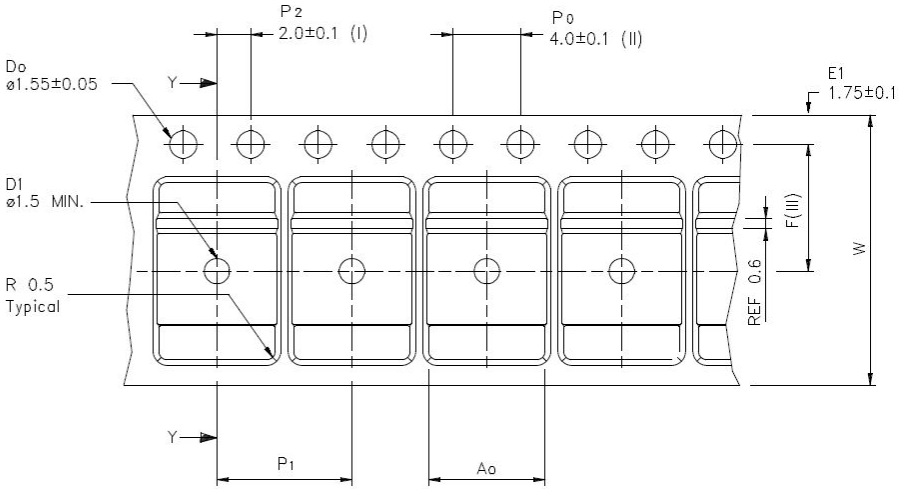


TO-252 编带规格尺寸
TO-252 TAPE AND REEL DATA

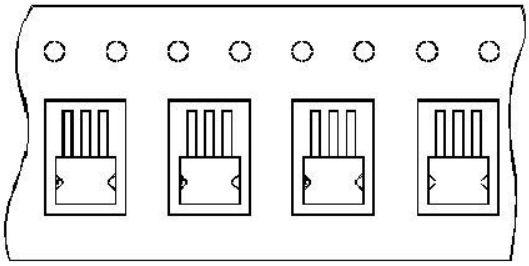
单位:毫米/UNIT：mm

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