

MJE NPN 系列晶体管 / MJE NPN SERIES TRANSISTORS

MJE13003HT

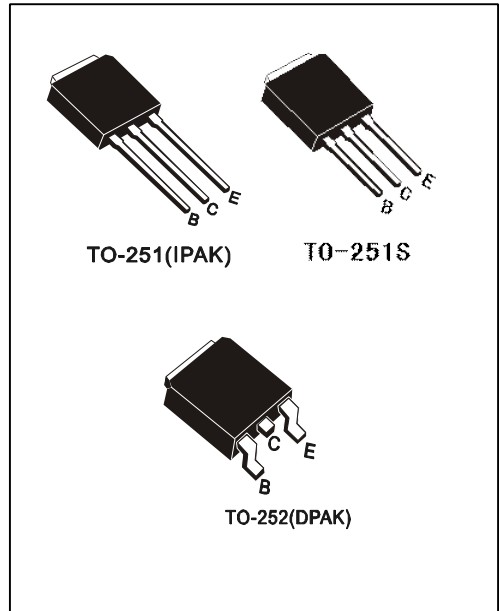
- 特点: 耐压高 开关速度快 安全工作区宽 符合 RoHS 规范
- FEATURES: ■HIGH VOLTAGE CAPABILITY ■HIGH SPEED SWITCHING ■WIDE SOA ■RoHS COMPLIANT
- 应用: 充电器 节能灯 电子镇流器
- APPLICATION: ■RECHARGER ■FLUORESCENT LAMP ■ELECTRONIC BALLAST

● 最大额定值 (Ta=25°C)

● Absolute Maximum Ratings (Ta=25°C)

TO-251/251S/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_{CBO}	850	V
集电极-发射极电压 Collector-Emitter Voltage	V_{CEO}	500	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	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_{CBO}	$V_{CB}=850V$		100	μA
集电极-发射极截止电流 Collector-Emitter Cutoff Current	I_{CEO}	$V_{CE}=500V, I_B=0$		250	μA
集电极-基极电压 Collector-Base Voltage	V_{CBO}	$I_C=1mA, I_E=0$	850		V
集电极-发射极电压 Collector-Emitter Voltage	V_{CEO}	$I_C=10mA, I_B=0$	500		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
		$I_C=1.5A, I_B=0.3A$		1.2	V
发射极-基极饱和电压 Base-Emitter Saturation Voltage	V_{besat}	$I_C=0.5A, I_B=0.1A$		1.0	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		

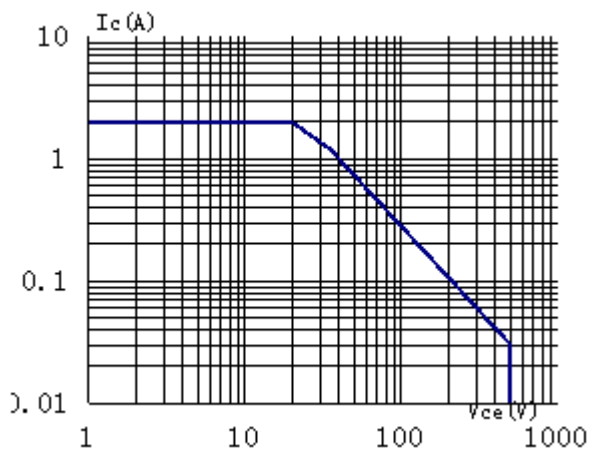
● 订单信息/ORDERING INFORMATION:

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

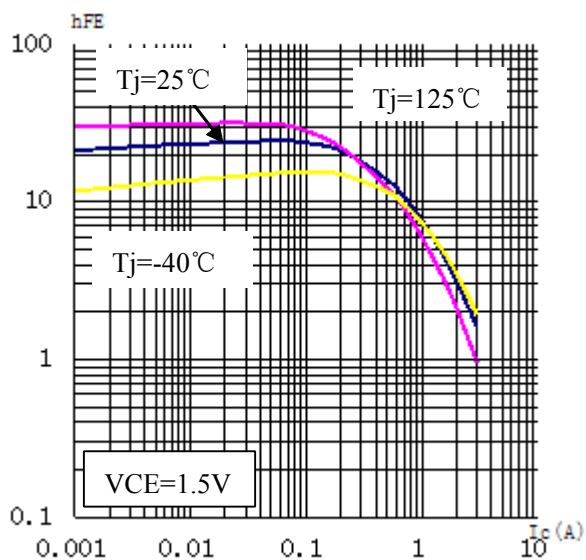
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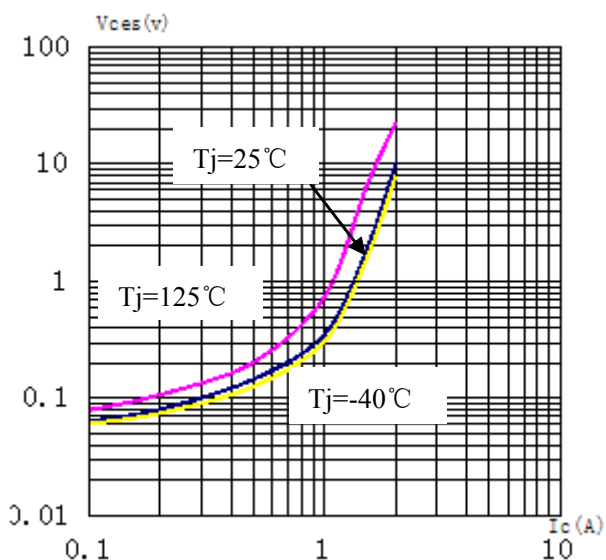
SOA(CD)



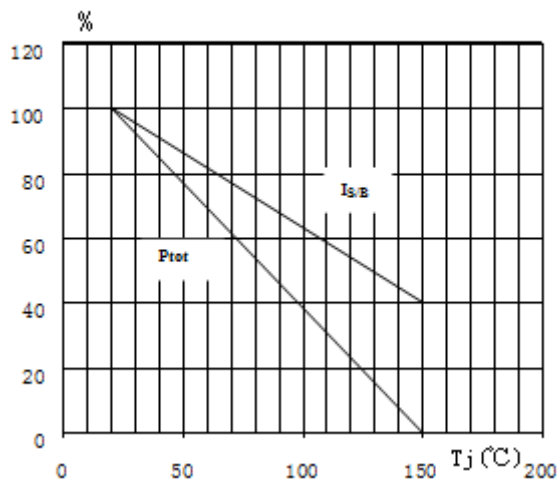
hFE-Ic



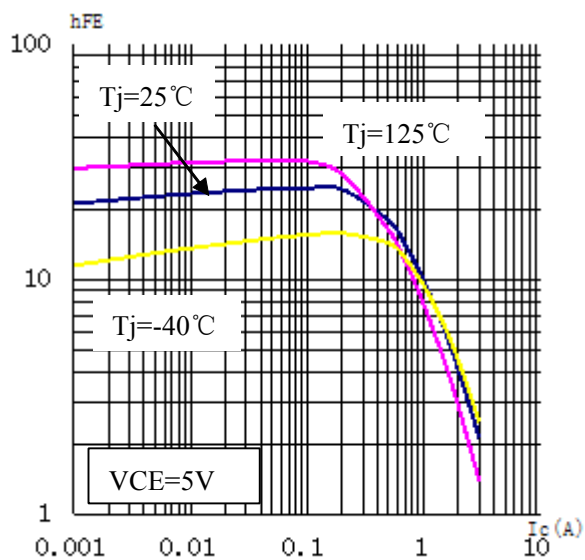
Vces-Ic



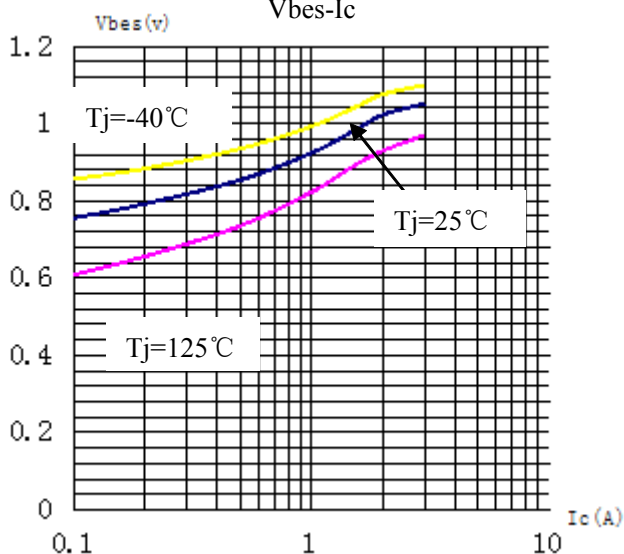
$P_{tot} \propto T_j$



hFE-Ic



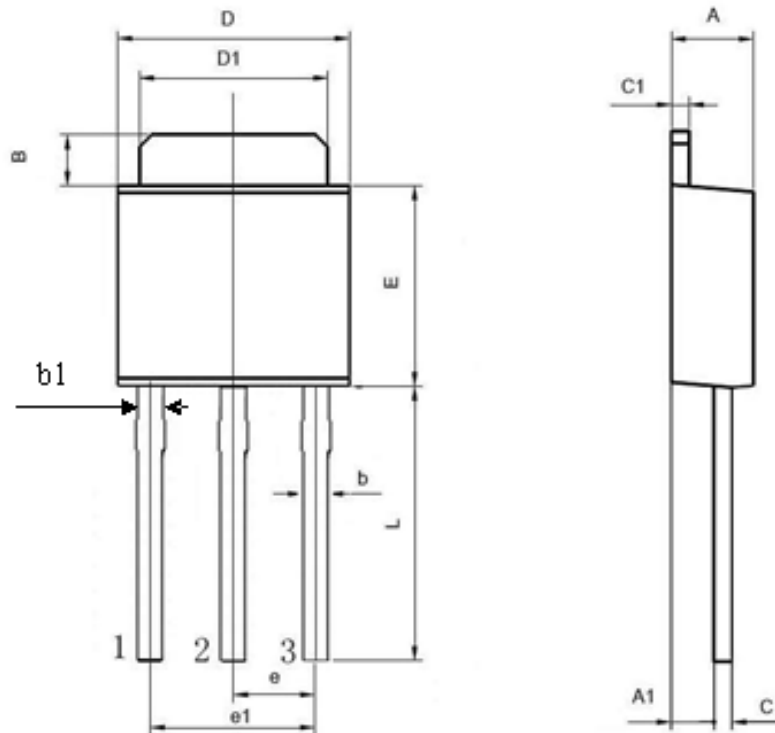
Vbes-Ic



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

单位:毫米/UNIT: mm

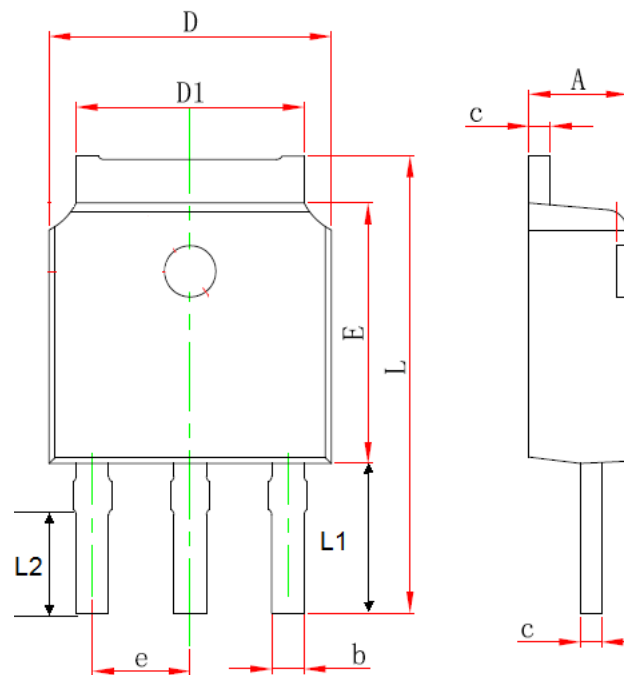
符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	2.10		2.50
A ₁	0.95		1.30
B	0.80		1.25
b	0.50		0.80
b ₁	0.70		0.90
c	0.45		0.70
c ₁	0.45		0.70
D	6.35		6.80
D ₁	5.10		5.50
E	5.30		6.30
e	2.25	2.30	2.35
L	7.00		9.20



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	0.60		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	0.50	0.90
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			

