

MJE NPN 系列晶体管/ MJE NPN SERIES TRANSISTORS

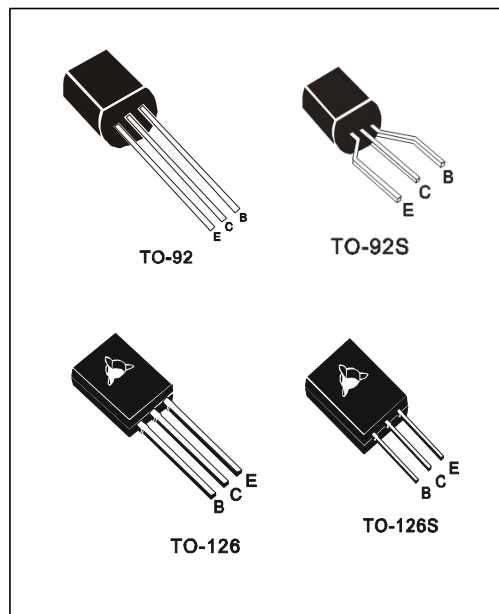
MJE13003H

- 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-92/92S/126/126S

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}	TO-92/92S:1.2 TO-126/126S:1.3	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}	$V_{CE}=480V, I_B=0$		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}	$I_C=10mA, I_B=0$	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
		$I_C=1.5A, I_B=0.3A$		1.2	V
发射极-基极饱和电压 Base-Emitter Saturation Voltage	V_{besat}	$I_C=0.5A, I_B=0.1A$		1.1	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		

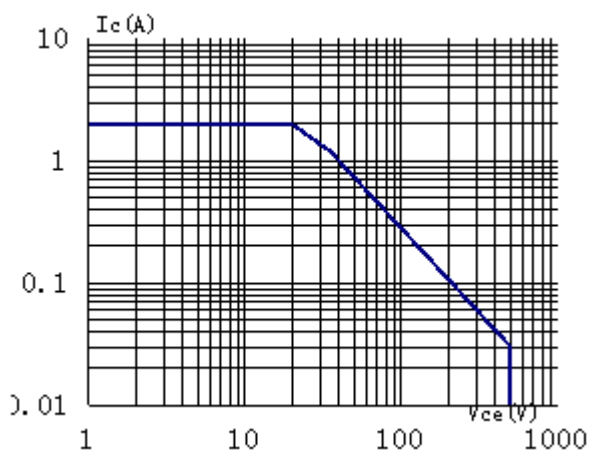
●订单信息/ORDERING INFORMATION:

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-92 普通袋装/NORMAL PACKING	MJE13003H TO-92	MJE13003H TO-92-HF
TO-92S 普通袋装/NORMAL PACKING	MJE13003H TO-92S	MJE13003H TO-92S-HF
TO-92 盒式编带/AMMOPACK	MJE13003H TO-92-AP	MJE13003H TO-92-AP-HF
TO-126 普通袋装/NORMAL PACKING	MJE13003H TO-126	MJE13003H TO-126-HF
TO-126S 普通袋装/NORMAL PACKING	MJE13003H TO-126S	MJE13003H TO-126S-HF

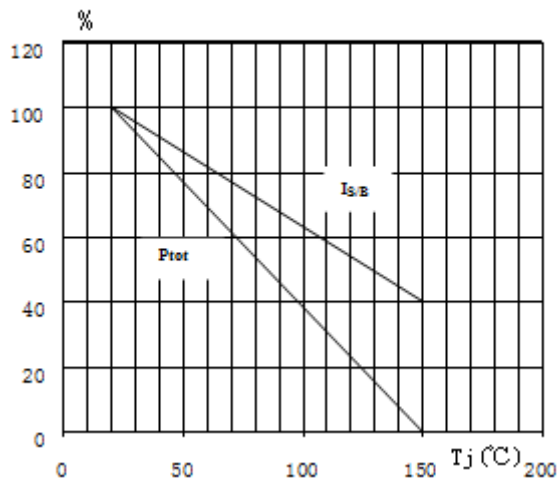
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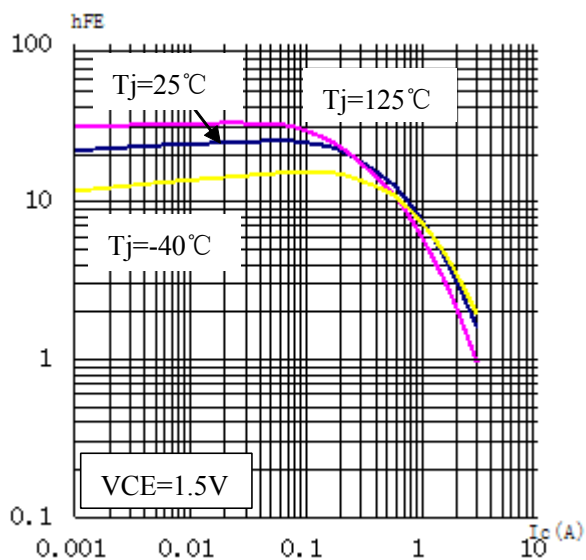
SOA(CD)



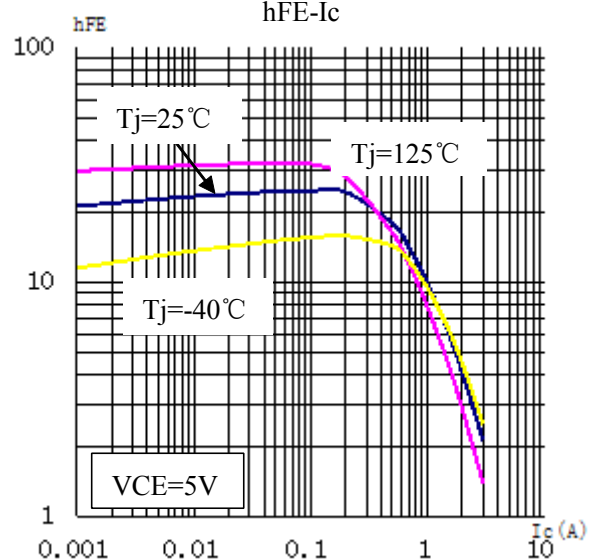
$P_{tot} \propto T_j$



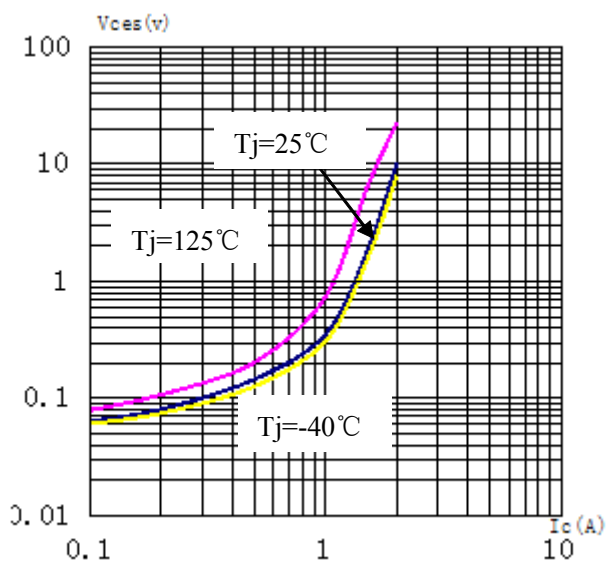
hFE-Ic



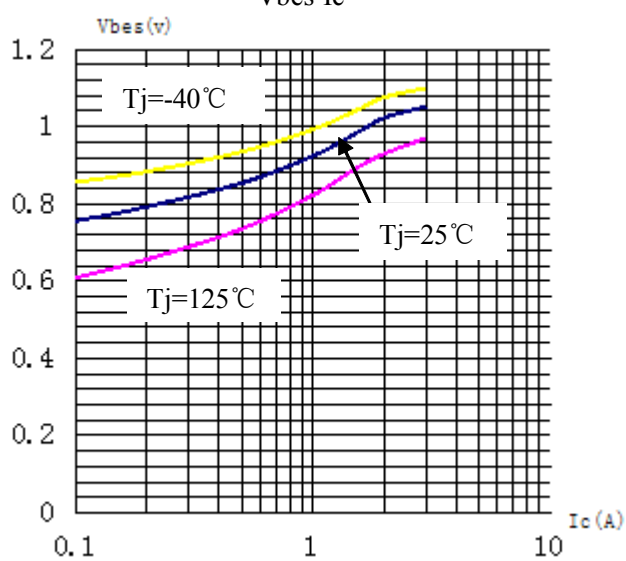
hFE-Ic



Vces-Ic



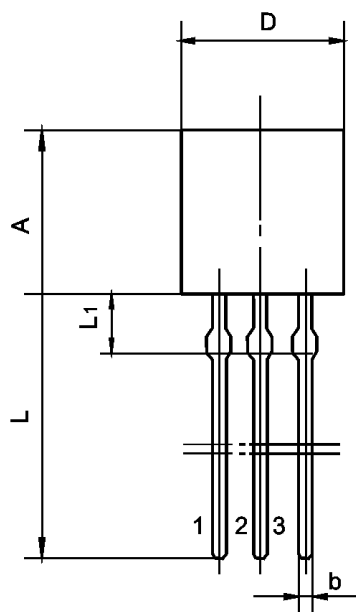
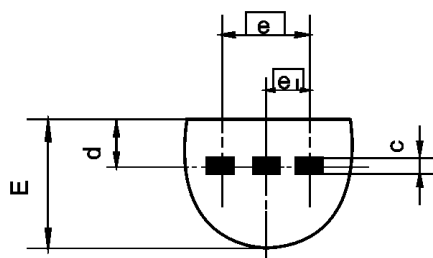
Vbes-Ic



TO-92 封装机械尺寸 TO-92 MECHANICAL DATA

单位:毫米/UNIT: mm

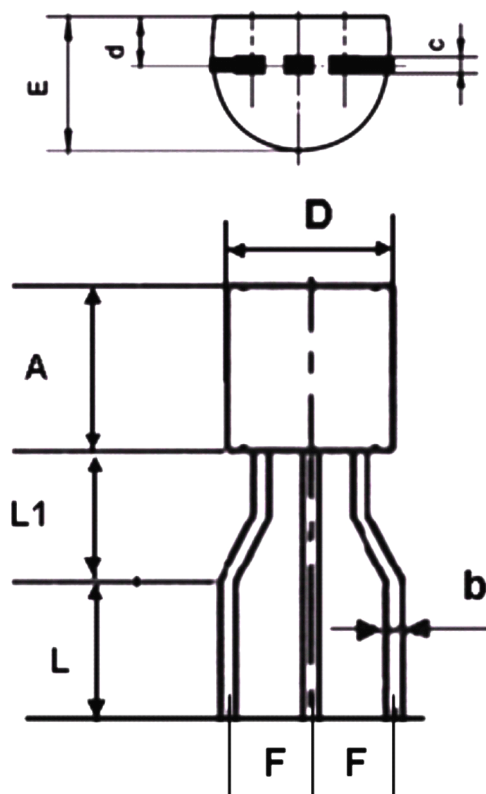
符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	4.30		5.30
b	0.30		0.55
c	0.30		0.50
$\varnothing D$ D	4.30		5.20
d	1.00		1.70
E	3.20		4.20
e		2.54	
e1		1.27	
L	12.70		15.00
L1	1.50		2.00



TO-92S 封装机械尺寸 TO-92S MECHANICAL DATA

单位:毫米/UNIT: mm

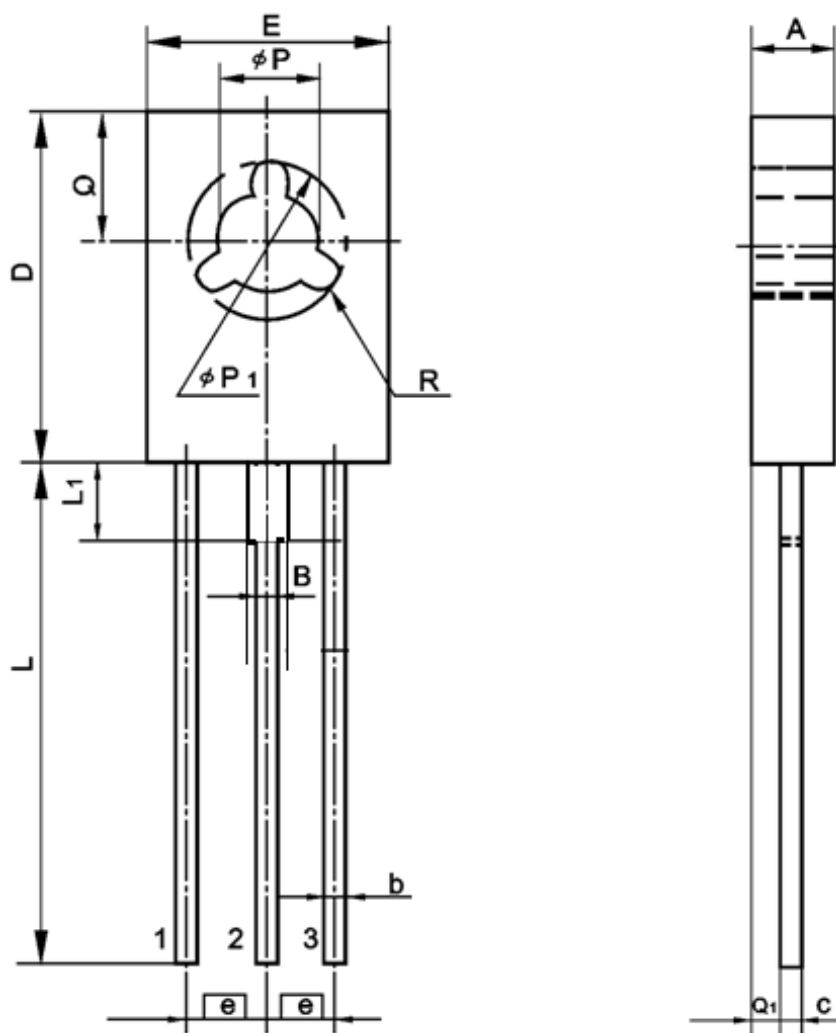
符号/SYMBOL	最小值/min	典型值/nom	最大值/max
A	4.30		5.30
b	0.30		0.55
c	0.30		0.50
D(ϕ D)	4.30		5.20
d	1.00		1.70
E	3.20		4.20
F	2.25	2.40	2.55
L	3.20		3.80
L1	2.60		2.70



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	

