EB SERIES TRANSISTORS EB13005

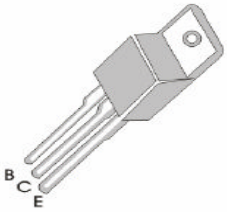
●**FEATURES**：①HIGH VOLTAGE CAPABILITY ②HIGH SPEED SWITCHING ③WIDE SOA

●**APPLICATION**：①FLUORESCENT LAMP ②ELECTRONIC BALLAST

●Absolute Maximum Ratings (Tc=25℃)

TO-220 NPN

PARAMETER	SYMBOL	VALUE	UNIT
Collector–Base Voltage	V_{CBO}	700	V
Collector–Emitter Voltage	V_{CEO}	400	V
Emitter –Base Voltage	V_{EBO}	9	V
Collector Current	I_C	5.0	A
Total Power Dissipation	P_C	75	W
Junction Temperature	T_j	150	℃
Storage Temperature	Tstg	-65-150	℃



TO-220

● Electronic Characteristics (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector–Base Cutoff Current	I_{CBO}	V_{CB}=700v		100	μA
Collector–Emitter Cutoff Current	I_{CEO}	V_{CE}=400v		250	μA
Collector–Emitter Voltage	V_{CEO}	I_C=10mA I_B=0	400		V
Emitter –Base Voltage	V_{EBO}	I_E=1mA I_C=0	9		V
Collector–Emitter Saturation Voltage	Vcesat	I_C=1A I_B=0.2A		0.5	V
		I_C=4A I_B=1A		1.5	V
Base–Emitter Saturation Voltage	Vbesat	I_C=1A I_B=0.2A		1.5	V
DC Current Gain	HFE	V_{CE}=5v I_C=10mA	7		
		V_{CE}=5v I_C=1A	10	40	
		V_{CE}=5v I_C=4A	5		
Storage Time	Ts	V_{CC}=5V	2.0	4.0	μS
Falling Time	T_f	I_C=0.5A		1.0	μS

●CLASSIFICATION OF HFE AND TS

HFE	10-15	15-20	20-25	25-30
TS	2.0-2.5	2.5-3.0	3.0-3.5	3.5-4.0

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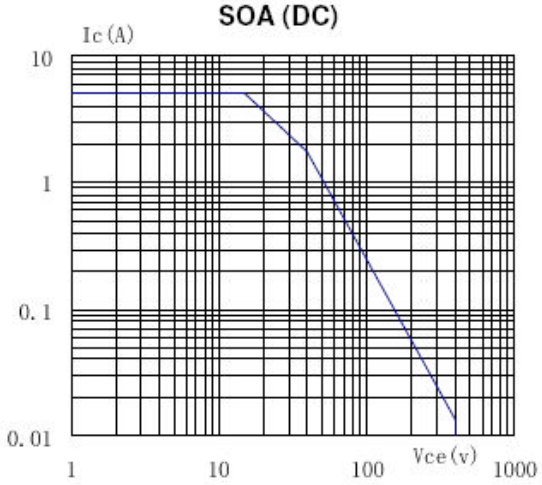
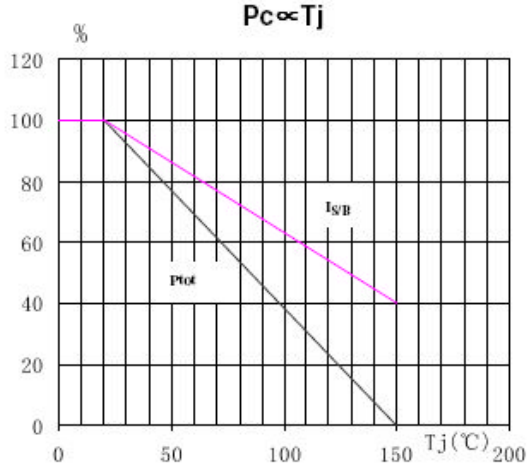
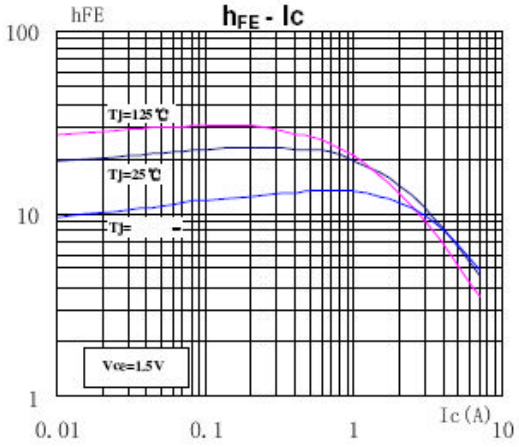
SOA (DC)



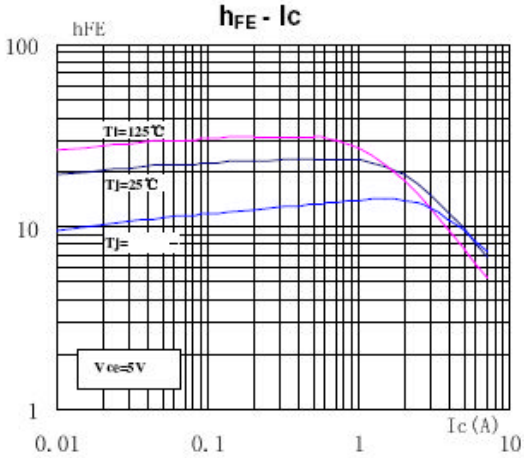
Pc∝Tj



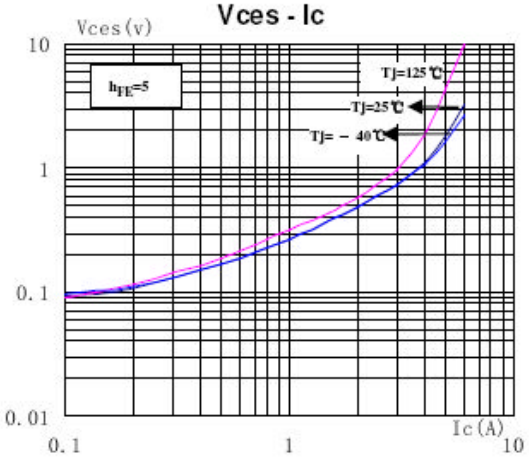
h_{FE} - Ic



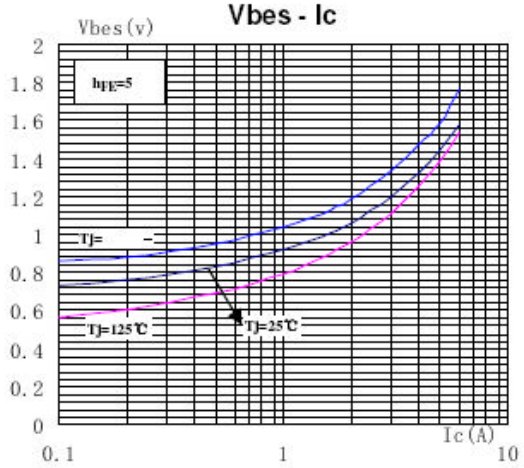
h_{FE} - Ic



Vces - Ic



Vbes - Ic



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TO-220 MECHANICAL DATA

SYMBOL	Min	Nom	Max	SYMBOL	Min	Nom	Max
A	3.5	4.5	5.0	L	12.5	13.5	14.5
B	1.25	1.35	1.5	L1	2.5	3.37	4.5
B1	0.75	0.85	0.955	D1	5.9	6.5	7.1
b	0.6			ϕb			1.2
c	0.35	0.43	0.55	Q	1.5	2.5	3.5
D	14.0	15.5	16.5	Q1	2.0	2.6	3.5
E	9.0	10.0	11.0	Z	3.0	3.8	4.5
e		2.54