EVTECH ELECTRONICS CO.,LIMITED

EV SERIES TRANSISTORS BJT100S

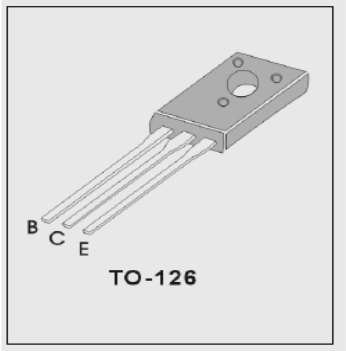
●**FEATURES:** ①HIGH VOLTAGE CAPABILITY ②HIGH SPEED SWITCHING ③WIDE SOA

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

●Absolute Maximum Ratings (Tc=25℃)

TO-126 NPN

PARAMETER	SYMBOL	VALUE	UNIT
Collector–Base Voltage	V_{CBO}	400	V
Collector–Emitter Voltage	V_{CEO}	200	V
Emitter –Base Voltage	V_{EBO}	9	V
Collector Current	I_C	2.5	A
Total Power Dissipation	P_C	30	W
Junction Temperature	T_j	150	℃
Storage Temperature	Tstg	-65-150	℃

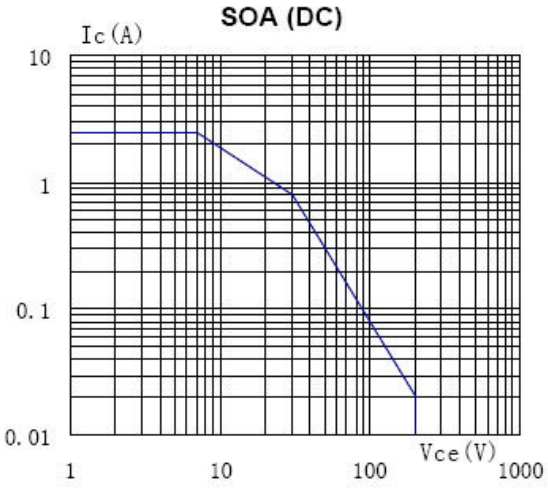


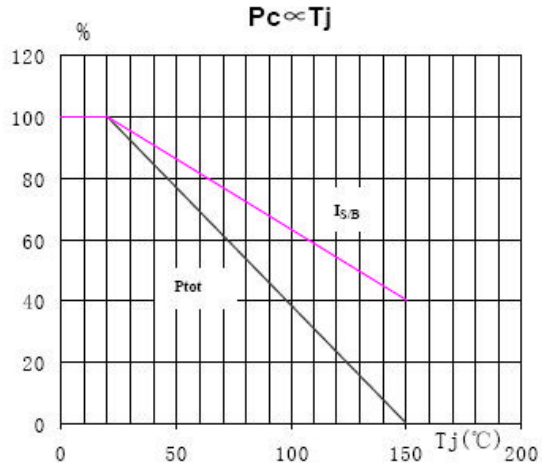
● Electronic Characteristics (Tc=25℃)

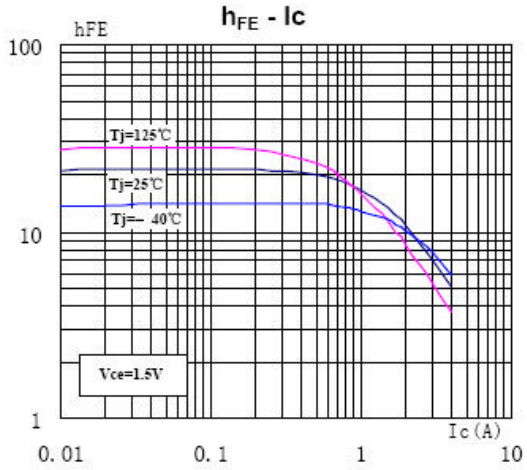
CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector–Base Cutoff Current	I_{CBO}	V_{CB}=400v		100	μ
Collector–Emitter Cutoff Current	I_{CEO}	V_{CE}=200v		250	μ
Collector–Emitter Voltage	V_{CEO}	I_C=10mA I_B=0	200		V
Emitter –Base Voltage	V_{EBO}	I_E=1mA I_C=0	9		V
Collector–Emitter Saturation Voltage	Vcesat	I_C=1.0A I_B=0.2A		1.0	V
		I_C=1.5A I_B=0..3A		1.2	V
Base–Emitter Saturation Voltage	Vbesat	I_C=1.5A I_B=0.3A		1.2	V
DC Current Gain	HFE	V_{CE}=5v I_C=1mA	7		
		V_{CE}=5v I_C=0.1A	10	40	
		V_{CE}=5v I_C=2.5A	5		
Storage Time	Ts	V_{CC}=5V I_C=0.25A	1.5	3.5	μ

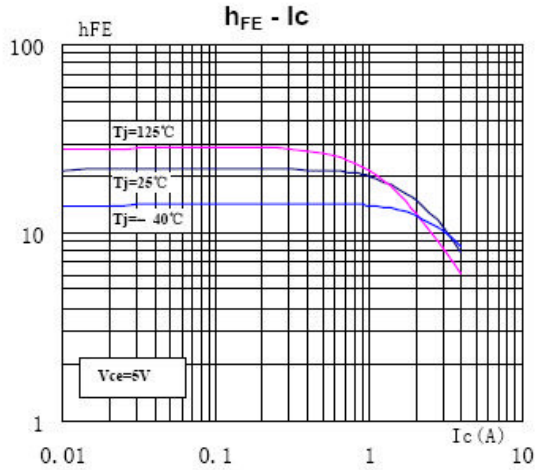
●CLASSIFICATION OF HFE AND TS

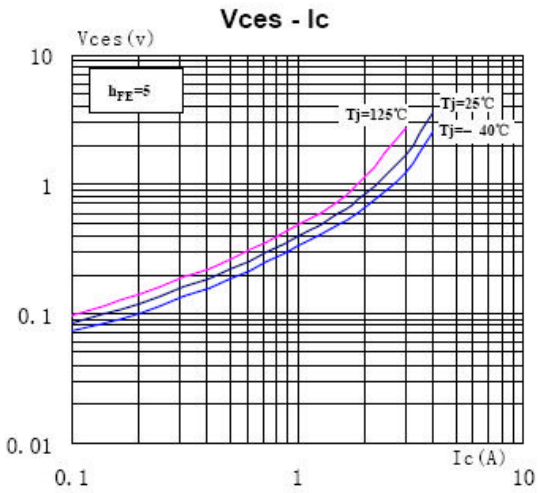
HFE	10-15	15-20	20-25	25-30
TS	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5

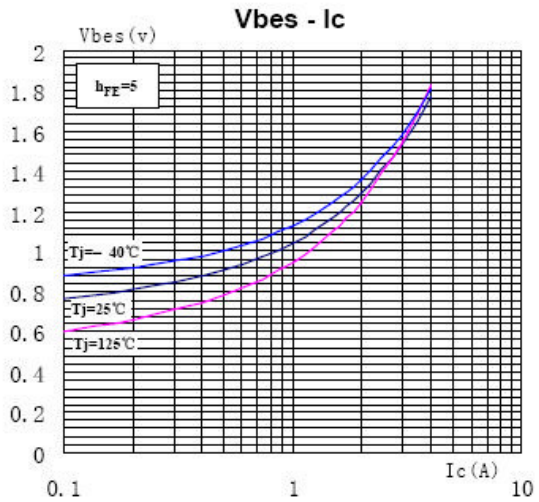

SOA (DC)
Ic(A)
10
1
0.1
0.01
1
10
100
1000
Vce(V)


Pc∝Tj
%
120
100
80
60
40
20
0
0
50
100
150
200
Tj(℃)
IS/B
Ptot


hFE - Ic
hFE
100
10
1
0.01
0.1
1
10
Ic(A)
Tj=125℃
Tj=25℃
Tj=— 40℃
Vce=1.5V


hFE - Ic
hFE
100
10
1
0.01
0.1
1
10
Ic(A)
Tj=125℃
Tj=25℃
Tj=— 40℃
Vce=5V


Vces - Ic
Vces(v)
10
1
0.1
0.01
0.1
1
10
Ic(A)
hFE=5
Tj=125℃
Tj=25℃
Tj=— 40℃


Vbes - Ic
Vbes(v)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.1
1
10
Ic(A)
hFE=5
Tj=— 40℃
Tj=25℃
Tj=125℃

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TO-126MECHANICAL DATA

SYMBOL	Min	Nom	Max	SYMBOL	Min	Nom	Max
A	2.3		2.8	L	15.3		16.5
B	1.0		1.2	L1			2.54
B1	0.8		1.0	P	3.0		3.2
b	0.65		0.88	P1		5.0	
c	.45		0.60	Q	3.6		4.4
D	10.5		11.1	Q1	0.9		1.5
E	7.2		7.8	R		0.5	
e		2.29