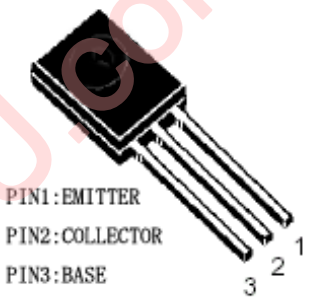
NPN SILICON POWER TRANSISTOR BUL1688L

● **FEATURES**: ■HIGH SWITCHING SPEED ■WIDE SOA

● **APPLICATIONS:** SUITABLE FOR 110V CIRCUIT MODE: ■COMPACT FLUORESCENT LAMP ■ELECTRONIC BALLASTS FOR FLUORESCENT LIGHTING ■SWITCH MODE POWER SUPPLIES

● MAXIMUM RATINGS（Tc=25°C） SOT-82

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	400	V
Collector-Emitter Voltage	V_{CEO}	250	V
Emitter-Base Voltage	V_{EBO}	9	V
Collector Current	I_C	8.0	A
Total Power Dissipation	P_C	60	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-65-150	°C

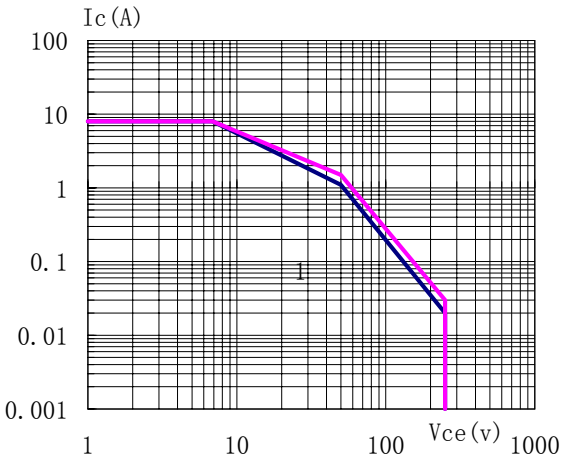


SOT-82
1- E、2-C、3- B

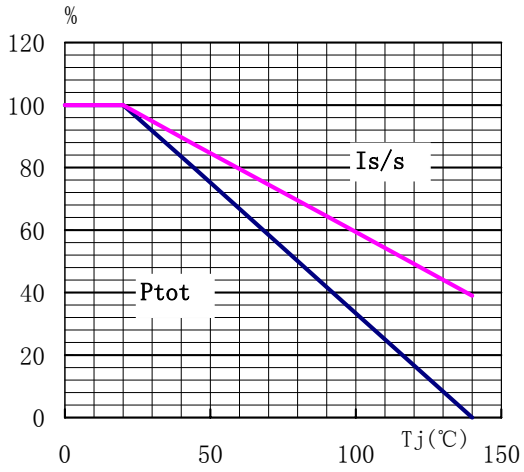
● ELECTRICAL CHARACTERISTICS（Tc=25°C）

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Cutoff Current	I_{CBO}	V_{CB}=400V		100	μA
Collector Cutoff Current	I_{CEO}	V_{CE}=250V,I_B=0		250	μA
Collector-Emitter Sustaining Voltage	V_{CEO}	I_C=10mA,I_B=0	250		V
Base-Emitter Sustaining Voltage	V_{EBO}	I_E=1mA,I_C=0	9		V
Collector-Emitter Saturation Voltage	Vces	I_C=1.0A,I_B=0.2A		0.5	V
		I_C=2.0A,I_B=0.4A		0.7	
		I_C=5.0A,I_B=1.0A		1.5	
Base-Emitter Saturation Voltage	Vbes	I_C=2.0A,I_B=0.4A		1.5	V
DC Current Gain	h_{FE}	V_{CE}=5V,I_C=10mA	8		
		V_{CE}=5V,I_C=1.0A	10	40	
		V_{CE}=5V,I_C=5A	5		

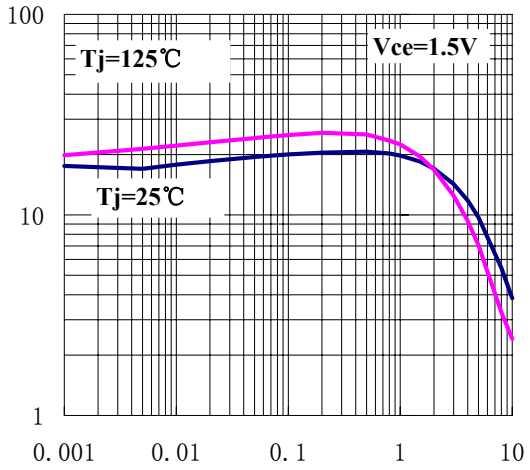
SOA(DC)



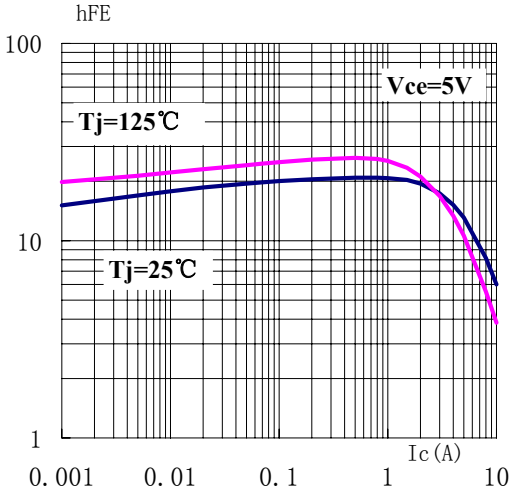
Pc∝Tj



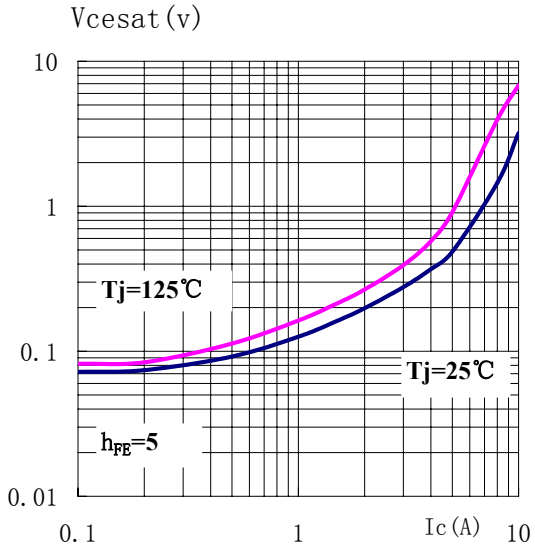
hFE-Ic



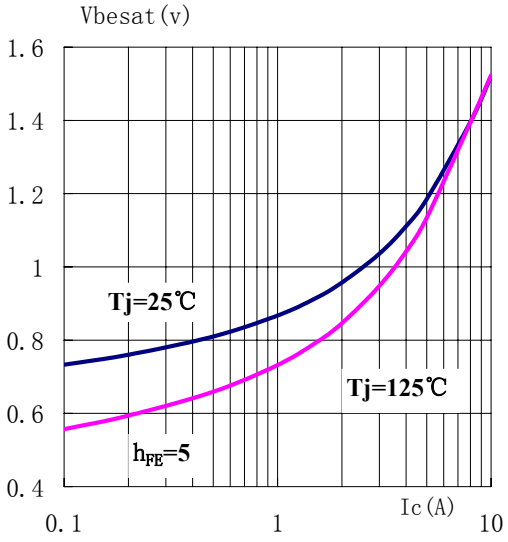
hFE-Ic



Vcesat-Ic



Vbesat-Ic



SOT-82 MECHANICAL DATA

UNIT：mm

SYMBOL	min	nom	max
A	7.4		7.8
B	10.5		10.8
b	0.7		0.9
b1	0.49		0.75
C	2.4		2.7
c1	1.0		1.3
D	15.4		16
e		2.2	
e3	4.15		4.65
F		3.8	
H			2.54
H2		2.15