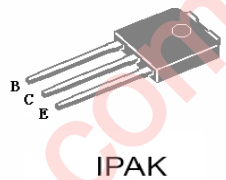
BUL SERIES TRANSISTORS BUL1688

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

● **APPLICATION:** ■FLUORESCENT LAMP ■ELECTRONIC BALLAST ■ELECTRONIC TRANSFORMER

● Absolute Maximum Ratings（Tc=25°C） TO-251

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	50	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-65-150	°C



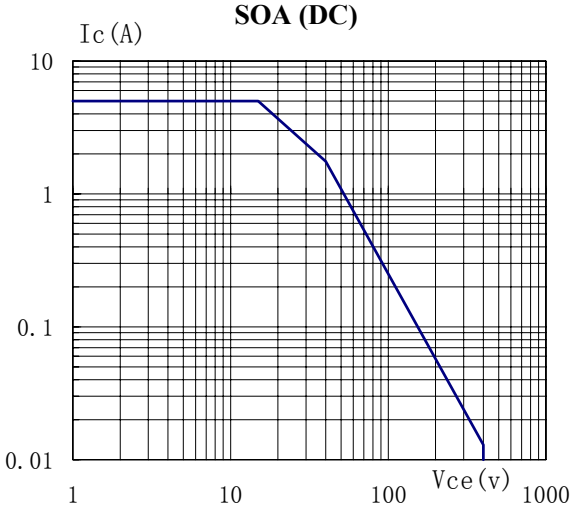
IPAK
(TO-251)

● Electronic Characteristics（Tc=25°C）

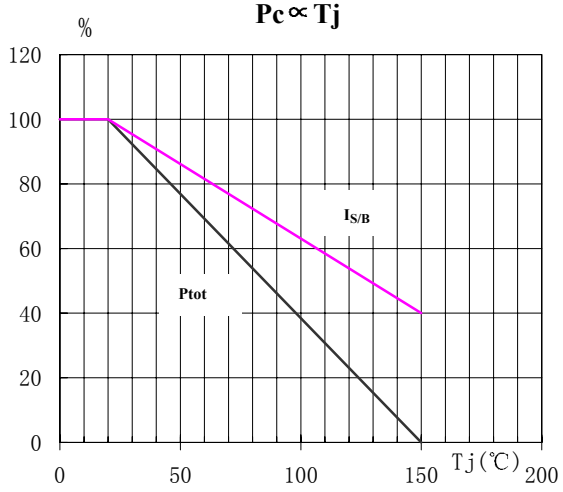
CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector-Base Cutoff Current	I_{CBO}	V_{CB}=700V		100	μA
Collector-Emitter Cutoff Current	I_{CEO}	V_{CE}=400V,I_B=0		250	μA
Collector-Emitter Voltage	V_{CEO}	I_C=10mA,I_B=0	400		V
Emitter-Base Voltage	V_{EBO}	I_E=1mA,I_C=0	9		V
Collector-Emitter Saturation Voltage	Vces	I_C=1.0A,I_B=0.2A		0.5	V
		I_C=2.0A,I_B=0.4A		0.7	
		I_C=4.0A,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=2.5A	8		
Storage Time	t_S	V_{CC}=250V, I_C=5I_B I_{B1}= -I_{B2}=0.5A		3	μS
Falling Time	tf			0.8	

BUL SERIES TRANSISTORS BUL1688

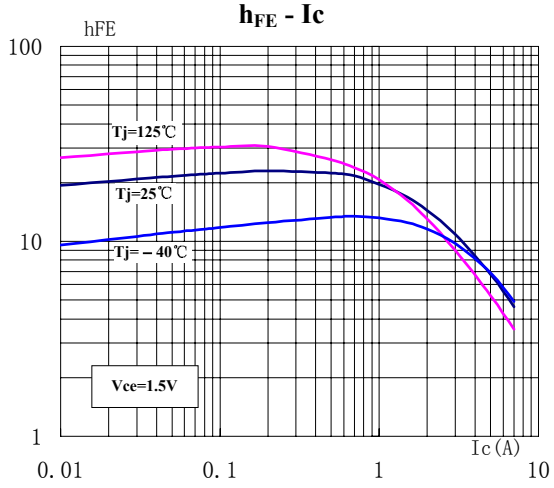
SOA (DC)



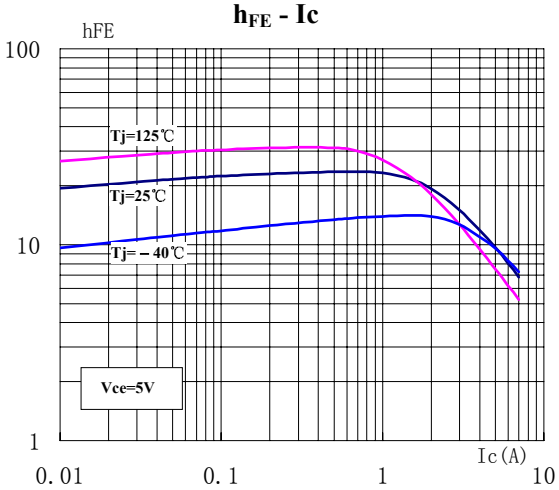
Pc∝Tj



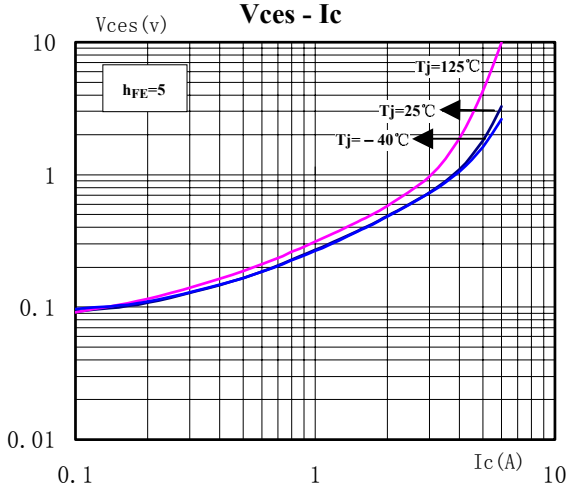
h_{FE} - Ic



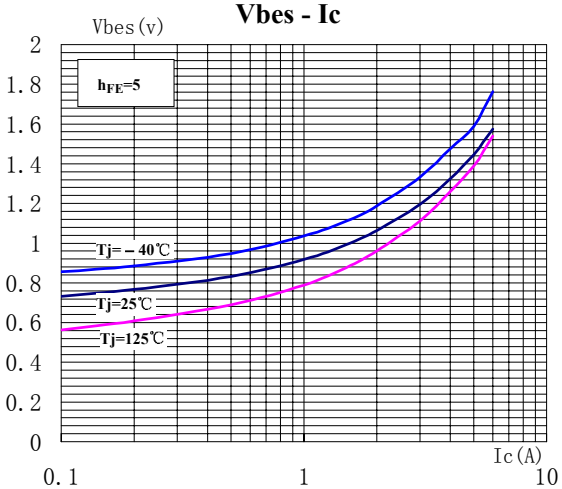
h_{FE} - Ic



Vces - Ic



Vbes - Ic



TO-251 (IPAK) MECHANICAL DATA

UNIT：mm

SYMBOL	min	nom	max
A	2.2		2.4
A_1	1.1		1.3
B	1.35		1.65
b	0.5		0.7
b_1	0.7		0.9
c	0.46		0.56
c1	0.46		0.56
D	6.35		6.65
D_1	5.2		5.4
E	5.4		5.6
e		2.3	
e_1	4.5		4.7
L	7.5		7.9