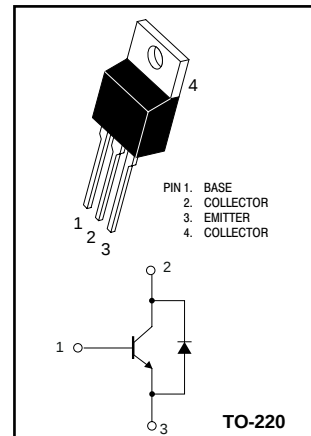


- **FEATURES:** ■ WIDE SOA ■ HIGH SPEED SWITCHING ■ HIGH VOLTAGE CAPABILITY
- **APPLICATION:** ■ FLUORESCENT LAMP ■ ELECTRONIC BALLAST ■ ELECTRONIC TRANSFORMER
- SWITCH MODE POWER SUPPLY

● **Absolute Maximum Ratings (Tc=25°C)**

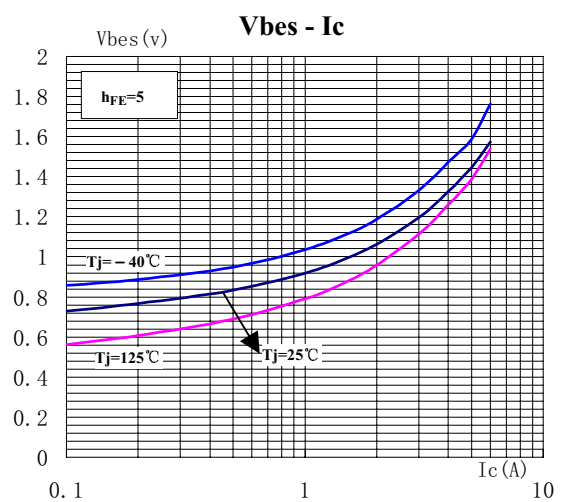
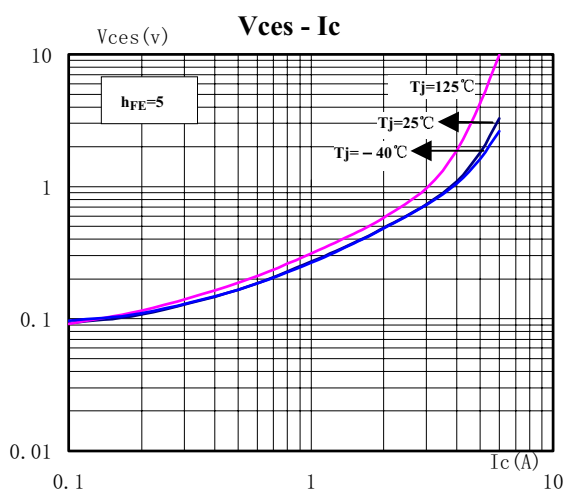
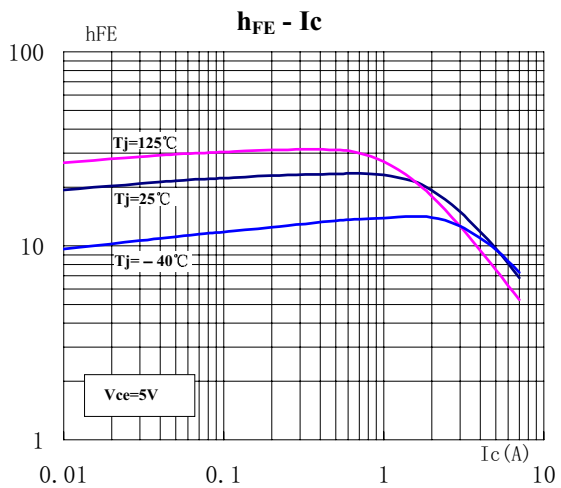
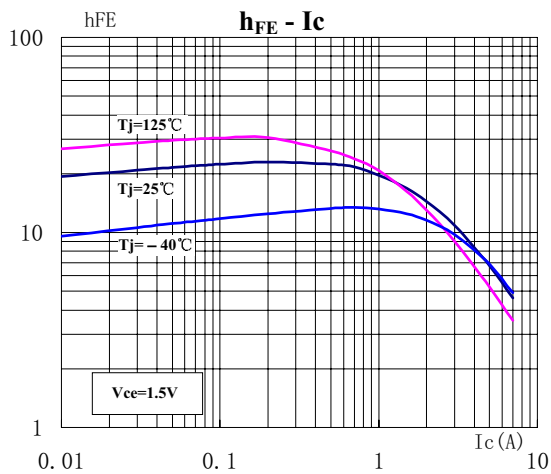
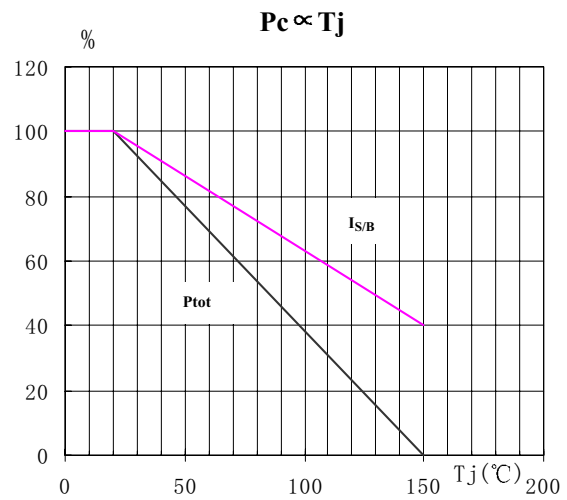
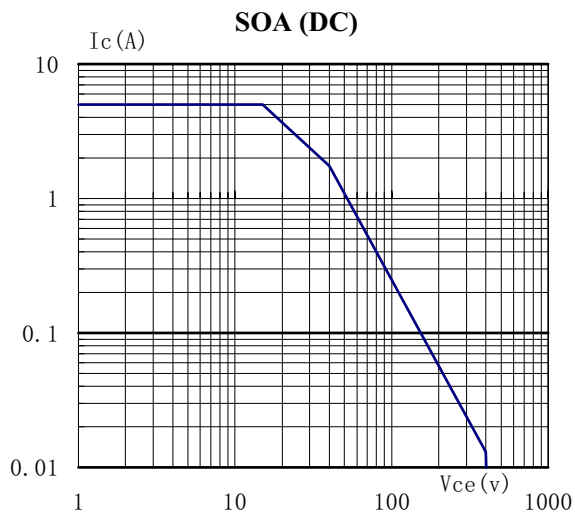
TO-220

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	700	V
Collector-Emitter Voltage	V_{CEO}	450	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	°C
Storage Temperature	T_{stg}	-65-150	°C



● **Electronic Characteristics (Tc=25°C)**

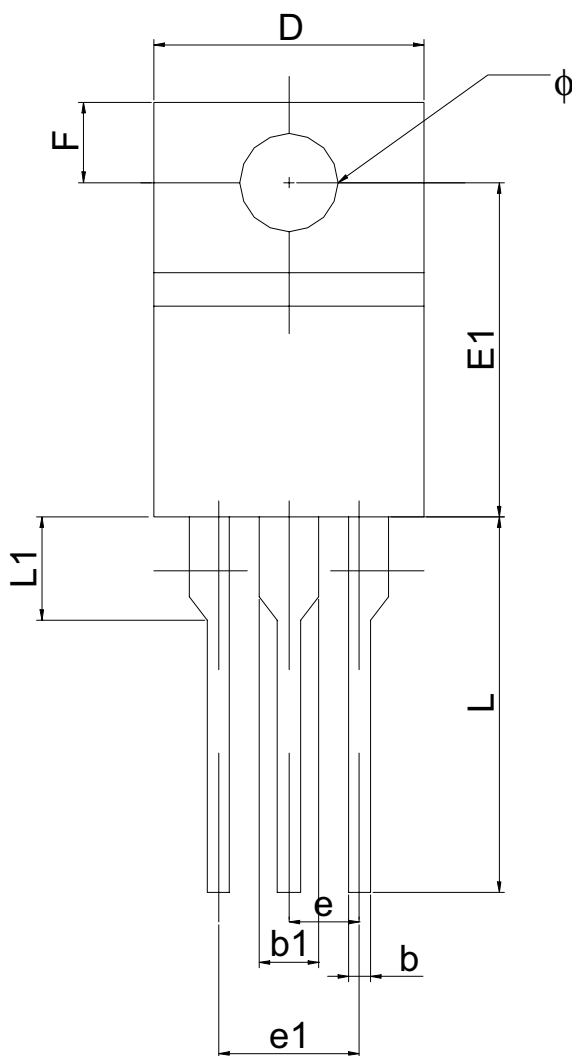
CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector-Base Cutoff Current	I_{CBO}	$V_{CB}=700V$		100	μA
Collector-Emitter Cutoff Current	I_{CEO}	$V_{CE}=450V, I_B=0$		250	μA
Collector-Emitter Voltage	V_{CEO}	$I_C=10mA, I_B=0$	450		V
Emitter -Base Voltage	V_{EBO}	$I_E=1mA, I_C=0$	9		V
Collector-Emitter Saturation Voltage	V_{ces}	$I_C=1.0A, I_B=0.2A$		0.5	V
		$I_C=2.0A, I_B=0.4A$		0.7	
		$I_C=4.0A, I_B=1.0A$		1	
Base-Emitter Saturation Voltage	V_{bes}	$I_C=2.0A, I_B=0.4A$		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	t_f			0.8	



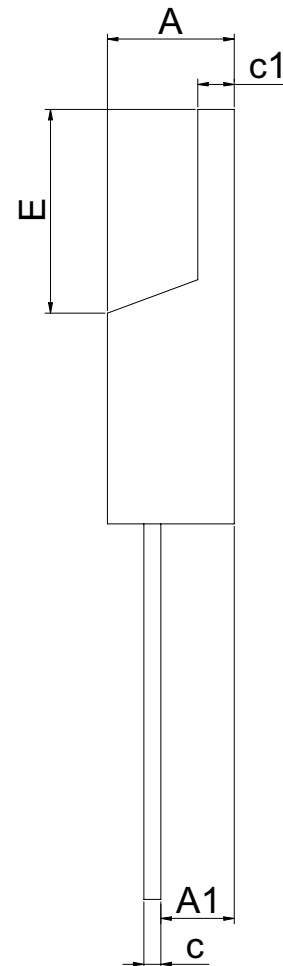
TO-220 MECHANICAL DATA

UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	4.47		4.67	e		2.54	
A1	2.52		2.82	e1	4.98		5.18
b	0.71		0.91	F	2.59		2.89
b1	1.17		1.37	L	13.40		13.80
c	0.31		0.53	L1	3.56		3.96
c1	1.17		1.37	ϕ	3.79		3.89
D	10.01		10.31				
E	8.50		8.90				
E1	12.06		12.46				



Front View



Side View