

深圳市晶泰源电子有限公司

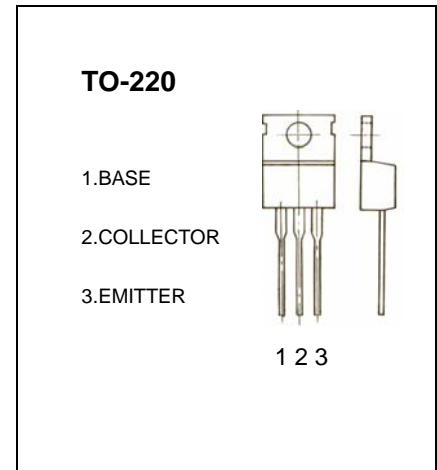
BUL128D TRANSISTOR (NPN)

FEATURES

- ELECTRONIC BALLASTS FOR FLUORESCENT LIGHTING
- FLYBACK AND FORWARD SINGLE TRANSISTOR LOW POWER CONVERTERS

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	700	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current -Continuous	4	A
P_C	Collector Power Dissipation	2	W
Rthj-case	Thermal Resistance Junction-Case Max	1.78	$^{\circ}\text{C}/\text{W}$
Rthj-amb	Thermal Resistance Junction-Ambient Max	62.5	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55-150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	700			V
Collector-emitter Sustaining voltage	$V_{CEO(SUS)}$	$I_C=100\text{mA}, L=25\text{mH}$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\text{mA}, I_C=0$	9			V
Collector cut-off current	I_{CBO}	$V_{CE}=400\text{V}, I_E=0$			0.1	mA
Collector Cut-off Current	I_{CES}	$V_{BE}=-1.5\text{V}, V_{CE}=700\text{V}$			0.1	mA
Emitter cut-off current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$			50	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=2\text{A}$	8		40	
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=10\text{mA}$	10			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=0.5\text{A}, I_B=0.1\text{A}$ $I_C=1\text{A}, I_B=0.2\text{A}$ $I_C=2.5\text{A}, I_B=0.5\text{A}$ $I_C=4\text{A}, I_B=1\text{A}$		0.5	0.7 1 1.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=0.5\text{A}, I_B=0.1\text{A}$ $I_C=1\text{A}, I_B=0.2\text{A}$ $I_C=2.5\text{A}, I_B=0.5\text{A}$			1.1 1.2 1.3	V
Forward Voltage Drop	V_F	$I_F=2\text{A}$			2.5	V
Fall time	t_f	$V_{CC}=200\text{V}, I_C=2\text{A}$ $I_{B1}=-I_{B2}=0.4\text{A}$		0.1		μs
Storage time	t_s			0.6		μs
Fall time	t_f	$V_{CC}=250\text{V}, I_C=2\text{A}$ $I_{B1}=-I_{B2}=0.4\text{A}$		0.2		μs
Storage time	t_s		2	2.9		μs

深圳市晶泰源电子有限公司

电话：0755-83211536 传真：0755-83206326

深圳市福田区华强北路华强广场C座11C