



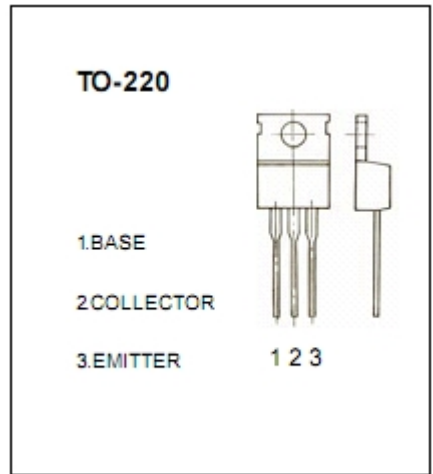
深圳市龙晶微电子有限公司

TO-220 Plastic-Encapsulate Transistors

ALJ13005

TRANSISTOR(NPN)

MAXIMUM RATINGS(Ta=25°C unless otherwise noted)



Symbol	Parameter	Value	Units
VCBO	Collector-Base Voltage	700	V
VCEO	Collector-Emitter Voltage	400	V
VEBO	Emitter-Base Voltage	9	V
IC	Collector Current	5.0	A
PC	Collector Power Dissipation	75	W
Tj	Junction Temperature	150	°C
Tstg	Storage Temperature	-55~150	°C

ELECTRICAL CHARACTERISTICS(Tamb=25°C unless otherwise specified):

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V(BR)CBO	IC=100uA, IE=0	700			V
Collector-emitter breakdown voltage	V(BR)CEO	IC=1mA, IB=0	400			V
Emitter-base breakdown voltage	V(BR)EBO	IC=100uA, IC=0	9			V
Collector cut-off current	ICBO	VCB=700V, IE=0			0.1	μA
Emitter cut-off current	IEBO	VEB=9V, IC=0			0.1	μA
DC current gain	HFE	Vce=5V, IC=1.0A	15		30	
Collector-emitter saturation voltage	VCE(sat)	IC=2.0A, IB=0.5A			1.0	V
Base r-emitter saturation voltage	VBE(sat)	IC=2.0A, IB=0.5A			1.5	V
Storage Time	ts	UI9600 IC=0.5A	2.0		6.0	us
Rising Time	tr				1	us
Fall Time	tf				0.6	us
Transition frequency	fT	VCE=10V, IC=0.5A, f=1MHZ	5			MHz