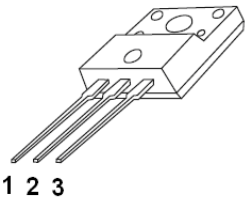
TO-220F Plastic-Encap sulate Transistors

3DA5371 TRANSIST OR (NPN)

TO-220F

1. BASE
2. COLLECTOR
3. EMITTE



FEATURES

- Breakdown Voltage High
- Reverse Cut-off Current Small
- Saturation Voltage Low
- Power dissipation

P_{CM} : 1.5W (T_a=25.)
25 W (T_c=25.)

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol Para	meter	Value	Unit
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	1.5	A
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARA CTERISTICS (T_a=25℃ unless other wise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=1mA, I_E=0 180				V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0 160				V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0 6				V
Collector cut-off current	I_{CBO} V	$_{CB}$=180V, I_E=0			10	μA
Emitter cut-off current	I_{EBO} V	$_{EB}$=6V, I_C=0			10	μA
DC current gain	h_{FE} *	V_{CE}=5V, I_C=200mA 60			240	
Collector-emitter saturation voltage	$V_{CE(sat)}$ *	I_C=500mA, I_B=50mA			1	V
Transition frequency	f_T V	$_{CE}$=10V, I_C=50mA 50				MHz

*Pulse test: t_p≤300μS, δ≤0.02.

CLASSIFICATION OF h_{FE}

Rank O		R
Range	60-140	100-240