

TO-220F Plastic-Encapsulate Transistors

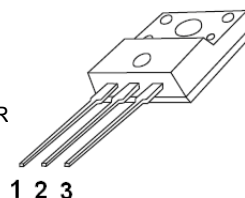
3CA2050 TRANSISTOR (PNP)

FEATURES

- High Breakdown Voltage
- General Purpose Switching and Amplification

TO – 220F

1. BASE
2. COLLECTOR
3. EMITTER



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

Symbol	Parameter	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	-1.5	A
P _C	Collector Power Dissipation	1.5	W
R _{θJA}	Thermal Resistance From Junction To Ambient	83	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise 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(1)}	V _{CE} =-5V, I _C =-0.2A	60		240	
	h _{FE(2)}	V _{CE} =-5V, I _C =-1.5A	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-500mA, I _B =-50mA			-1	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-0.05A	50			MHz

CLASSIFICATION OF h_{FE(1)}

RANK	R	O
RANGE	60-140	100-240