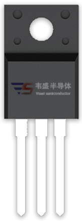
2SA2050 TRANSISTOR (PNP)



FEATURES

- High Breakdown Voltage
- General Purpose Switching and Amplification

MAXIMUM RATINGS (T_a=25℃ 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
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	83	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ 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