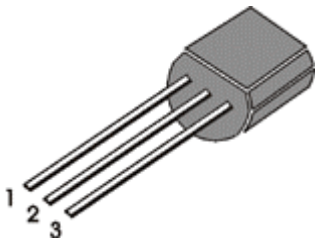
TIP8050

NPN SILICON TRANSISTOR

■ 2W OUTPUT AMPLIFIER
- Complementary to TIP8550
- Collector Current Ic=1.5A
- Collector Dissipation: Pc=2W (T_A=25℃)

TO-92



1.Emitter 2.Base 3.Collector

■ ABSOLUTE MAXIMUM RATINGS (T_A=25℃)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Collector Dissipation	P_C	2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-65 ~ 150	℃

■ ELECTRICAL CHARACTERISTICS (T_A=25℃)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Base Breakdown Voltage	BV_{CBO}	I_C=100uA, I_E=0	40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=2mA, I_B=0	25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=100uA, I_C=0	6			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=35V, I_E=0			100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=6V, I_C=0			150	nA
DC Current Gain	h_{FE1}	V_{CE}=1V, I_C=5mA	45	135		
	h_{FE2}	V_{CE}=1V, I_C=100mA	85	160	300	
	h_{FE3}	V_{CE}=1V, I_C=800mA	40	110		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=800mA,I_B=80mA		0.28	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=800mA, I_B=80mA		0.98	1.2	V
Base-Emitter Voltage	V_{BE}	V_{CE}=1V, I_C=10mA		0.66	1	V
Output Capacitance	C_{OB}	V_{CB}=10V, I_E=0, f=1MHZ		9.0		pF
Current Gain-Bandwidth Product	f_T	V_{CE}=10V, I_C=50mA	100	190		MHz

h_{FE}(2) CLASSIFICATION

Classification	B	C	D
h_{FE}(2)	85 - 120	120 - 180	180 - 300

Previous return next