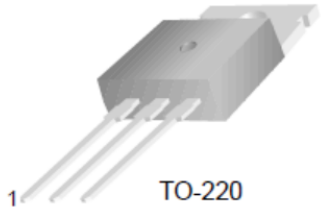
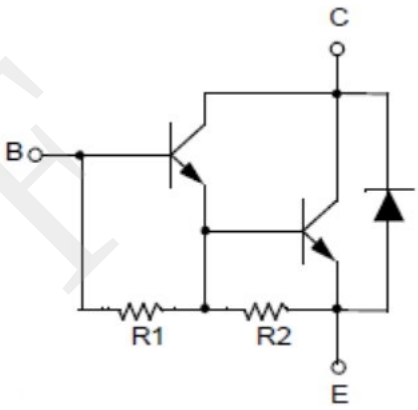
NPN Silicon
Darlington Transistor

TIP122

FEATURES

- High DC Current Gain
- Low Collector-Emitter Saturation Voltage
- Complementary to TIP127
- Package:TO-220





Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	100	V
Collector-emitter voltage	V_{CEO}	100	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	5	A
Collector Power Dissipation	P_C	2	W
	P_C (Tc = 25°)	65	
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-60～+150	℃

Electrical Characteristics（Ta=25℃）

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=1mA,I_E=0	100			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=30mA,I_B=0	100			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_B=5mA, I_C=0	5			V
collector-base cut-off current	I_{CBO}	V_{CB}=100V，I_E=0			0.2	mA
collector-emitter cut-off current	I_{CEO}	V_{CE}=50V，I_B=0			0.5	mA
emitter-base cut-off current	I_{EBO}	V_{EB}=5V，I_C=0			2	mA
DC current gain	H_{FE}	V_{CE}=3V，I_C=3A	1000			
		V_{CE}=3V，I_C=0.5A	1000			
collector-emitter saturation voltage	V_{CESAT1}	I_C=3A，I_B=12mA			2	V
	V_{CESAT2}	I_C=5A，I_B=20mA			4	
Base−Emitter On Voltage	$V_{BE(on)}$	V_{CE}=3V，I_C=3A			2.5	V
Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=0.1MHz			200	pF

.