

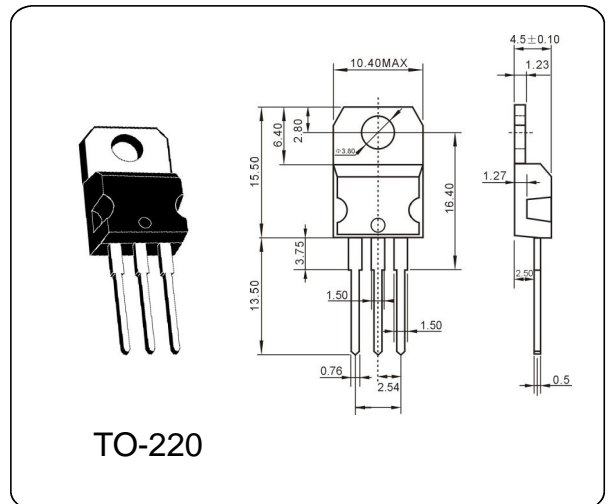


DESCRIPTION

The TIP122 are silicon Epitaxial-Base NPN power transistors in monolithic Darlington configuration mounted in Jedec TO-220 plastic package. They are intended for use in power linear and switching applications. The complementary PNP types are TIP127 respectively.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	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	5.0	A
Base Current	I_B	0.1	A
Total Dissipation at	P_{tot}	65	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CEO}	$V_{CB}=100V, I_E=0$			0.5	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$			2.0	mA
Collector-Emitter Sustaining Voltage	V_{CEO}	$I_C=30mA, I_B=0$	100			V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=3V, I_C=0.5A$	1000			
	$h_{FE(2)}$	$V_{CE}=3V, I_C=3.0A$	1000			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3.0A, I_B=12mA$			2	V
		$I_C=5.0A, I_B=20mA$			4	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$V_{CE}=3V, I_C=3.0A$			2.5	V