

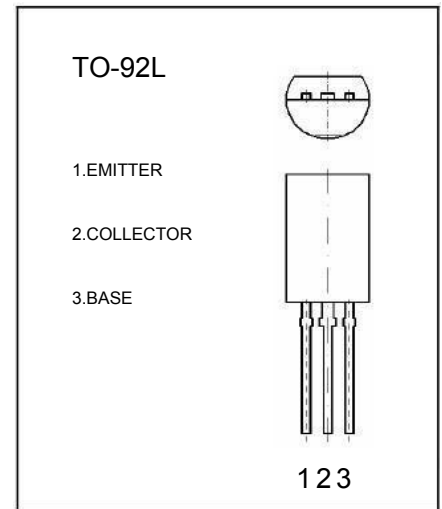


TO-92L Plastic-Encapsulate Transistors

B1243 TRANSISTOR(PNP)

FEATURES

Low collector to emitter saturation voltage $V_{CE(sat)}$.
Complementary pair with B1864



MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter		Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	-3.0	A
P_C	Collector Power Dissipation	1.0	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			-1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			-1.0	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=3\text{V}, I_C=500\text{mA}$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2.0\text{A}, I_B=200\text{mA}$			-1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=2.0\text{A}, I_B=200\text{mA}$			-1.5	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=500\text{mA}$ $f=30\text{MHz}$		70		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	P	Q	R
Range	82-180	120-270	180-390

