2SC1815

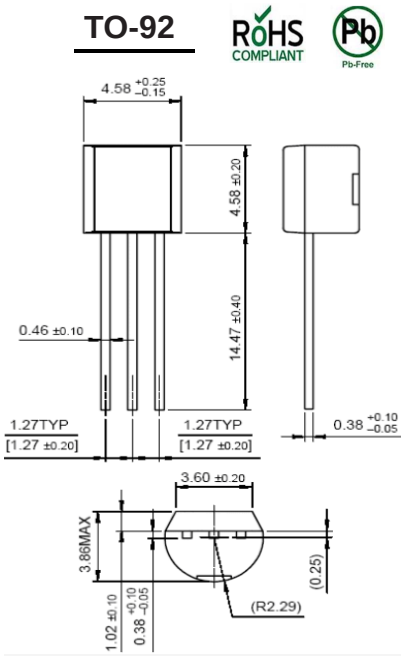
PNP Transistor Plastic-Encapsulate Transisors

Features

Complementary type the PNP transistor

A1015 is recommended.

TO-92



Maximum ratings (AT T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	150	mA
Collector Power Dissipation	P_C	0.2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55 to +150	℃

Electrical characteristics (AT T_A=25°C unless otherwise noted)

Off characteristics

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	VCBO	I_C= 100uA, I_E=0	60			V
Collector-emitter breakdown voltage	VCEO	I_C= 0.1mA, I_B=0	50			V
Emitter-base breakdown voltage	VEBO	IE=100μA, IC=0	5			V
Collector cut-off current	ICBO	V_{CB}=60V, I_E=0			0.1	uA
Collector cut-off current	ICE	V_{CE}=50V, I_B=0			0.1	uA
Emitter cut-off current	IEB	V_{EB}= 5V, I_C=0			0.1	uA
DC current gain	hFE	V_{CE}= 6V, I_C= 2mA	70		700	
Collector-emitter saturation voltage	VCE(sat)	I_C=100mA, I_B= 10mA			0.25	V
Base-emitter saturation voltage	VBE(sat)	I_C=100mA, I_B= 10mA			1	V
Transition frequency	fT	V_{CE}=10V, I_C= 1mA, f=30MHz	80			MHz

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR
Range	70~140	120~240	200~400

Typical Characteristics

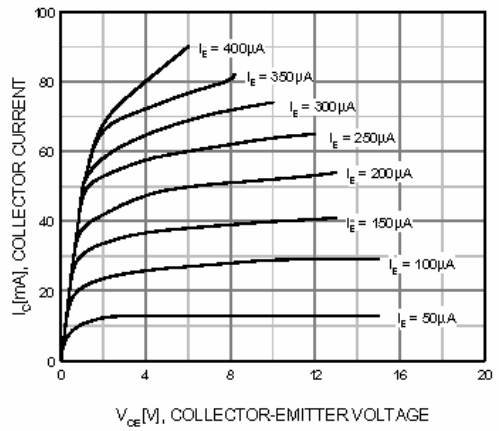


Figure 1. Static Characteristic

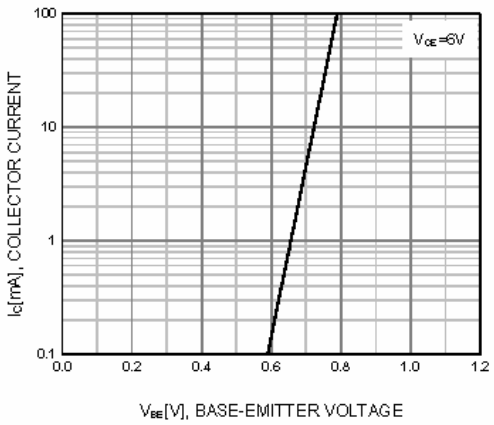


Figure 2. Transfer Characteristic

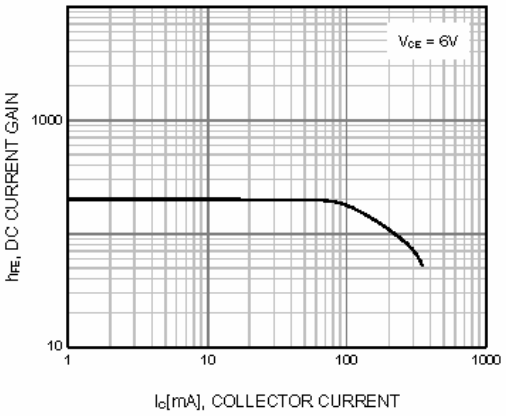


Figure 3. DC current Gain

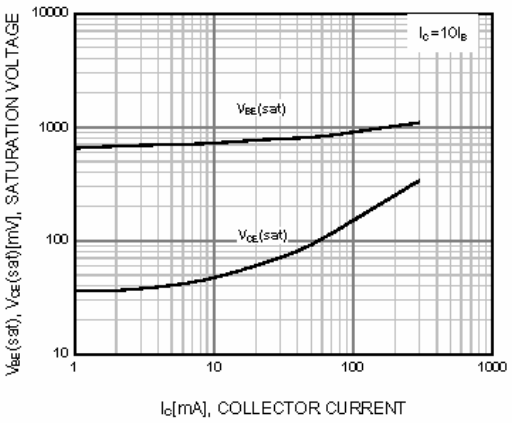


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

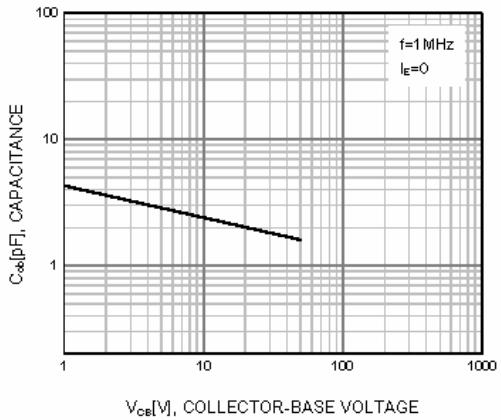


Figure 5. Output Capacitance

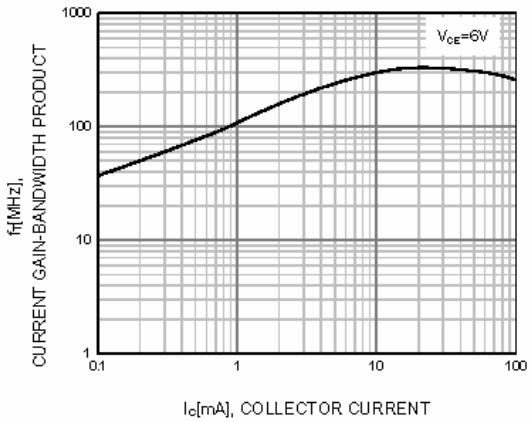


Figure 6. Current Gain Bandwidth Product