

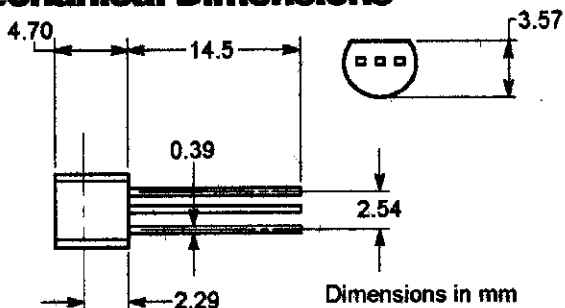
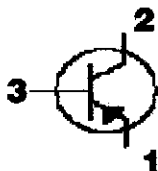
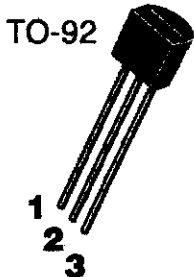


Description

PNP Epitaxial Planar Transistor

Mechanical Dimensions

2SA1015



Maximum Ratings

Ratings	Symbol	Value	Units
Collector - Emitter Voltage	V_{CE0}	-50	V
Collector - Base Voltage	V_{CB0}	-50	V
Emitter - Base Voltage	V_{EB0}	-5.0	V
Collector Current (Continuous)	I_C	-150	mA
Total Device Dissipation FR-5 Board (Note 1) $T_A = 25^\circ\text{C}$	P_D	400	mW
Junction and Storage Temperature	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

Electrical Characteristics @ 25°C

Characteristic	Symbol	Min	Max	Unit
Collector - Emitter Breakdown Voltage ($I_C = -1.0\text{mA}$)	$V_{BR(CEO)}$	-50	---	V
Collector - Base Breakdown Voltage ($I_C = -0.1\text{mA}$)	$V_{BR(CBO)}$	-50	---	V
Emitter - Base Breakdown Voltage ($I_E = -0.01\text{mA}$)	$V_{BR(EB0)}$	-5.0	---	V
Collector Cutoff Current ($V_{CB} = -50\text{V}$)	I_{CB0}	---	-0.1	μA
Emitter Cutoff Current ($V_{EB} = -5.0\text{V}$)	I_{EB0}	---	-0.1	μA
DC Current Gain ($I_C = -2.0\text{mA}, V_{CE} = -6.0\text{V}$)* ($I_C = -150\text{mA}, V_{CE} = -6.0\text{V}$)	H_{FE}	120 25	700 ---	---
Collector - Emitter Saturation Voltage ($I_C = -100\text{mA}, I_B = -10\text{mA}$)	$V_{CE(sat)}$	---	-0.3	Vdc
Base - Emitter Saturation Voltage ($I_C = -100\text{mA}, I_B = -10\text{mA}$)	$V_{BE(sat)}$	---	-1.1	Vdc
Current - Gain - Bandwidth Product ($I_C = -1.0\text{mA}, V_{CE} = -10\text{V}, f = 100\text{MHz}$)	f_T	80	---	MHz
Output Capacitance ($V_{CB} = -10\text{V}, f = 1.0\text{MHz}$)	C_{ob}	---	7.0	pF

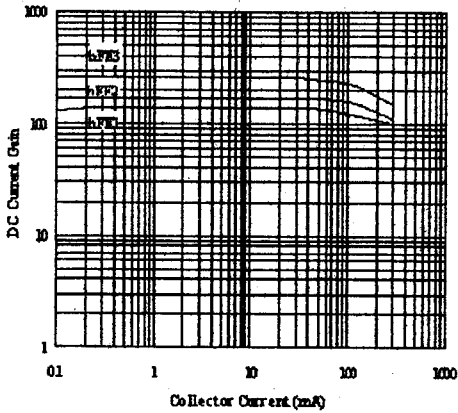
* Classification of h_{FE}

Rank	Y	GR	BL
Range	120-240	200-400	350-700

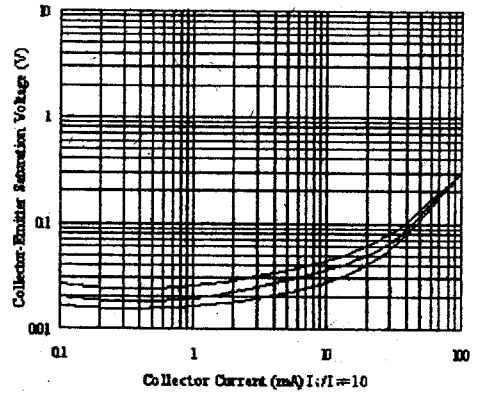


2SA1015 PNP Epitaxial Planar Transistor

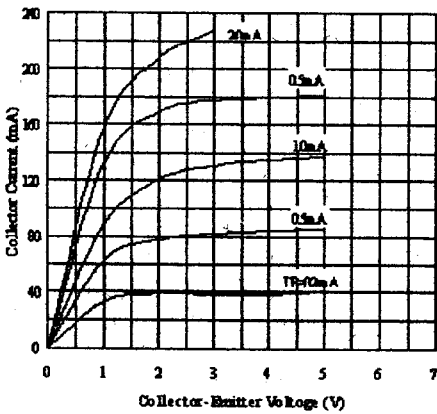
DC CURRENT GAIN



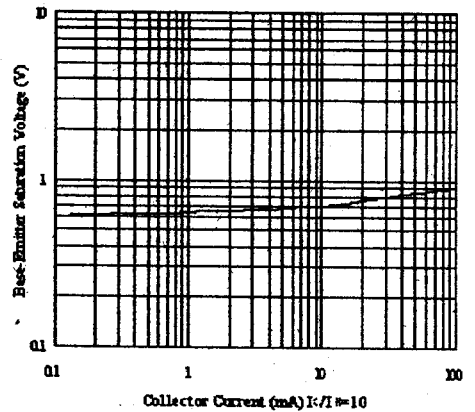
COLLECTOR-EMITTER SATURATION VOLTAGE



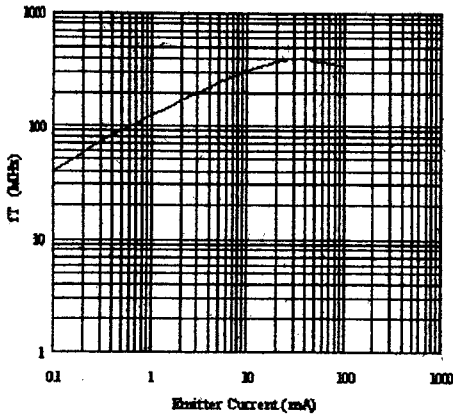
COLLECTOR-EMITTER VOLTAGE



BASE-EMITTER SATURATION VOLTAGE



f_T-I_E



POWER DISSIPATION

