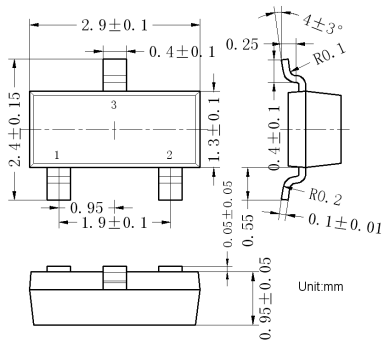
SOT-23 Plastic-Encapsulate Transistors

BCV26 PNP Darlington Transistor



1. Base
2. Emitter
3. Collector

Features

■ This device is designed for applications requiring extremely high current gain at currents to 800 mA.

Maximum Ratings (T_a=25°C unless otherwise noted)

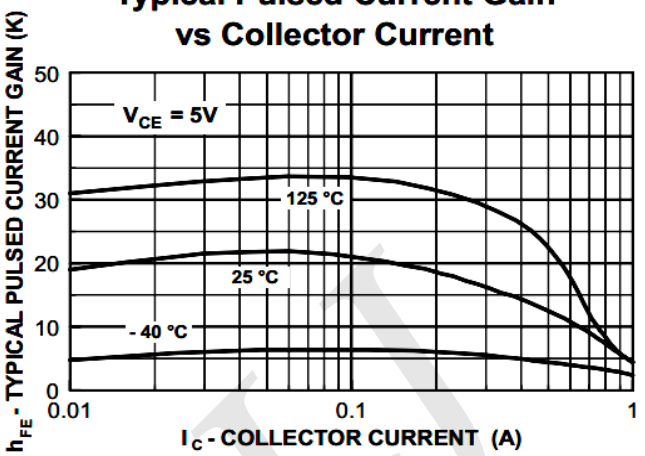
Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	-40	V
V_{CEO}	Collector Emitter Voltage	-30	V
V_{EBO}	Emitter Base Voltage	-10	V
I_C	Collector Current	-1.2	A
P_D	Total Device Dissipation Derate above 25°C	350 2.8	mW mW/°C
T_j, T_{stg}	Operating and Storage Junction Temperature Range	150	°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

Electrical Characteristics (T_a=25°C unless otherwise specified)

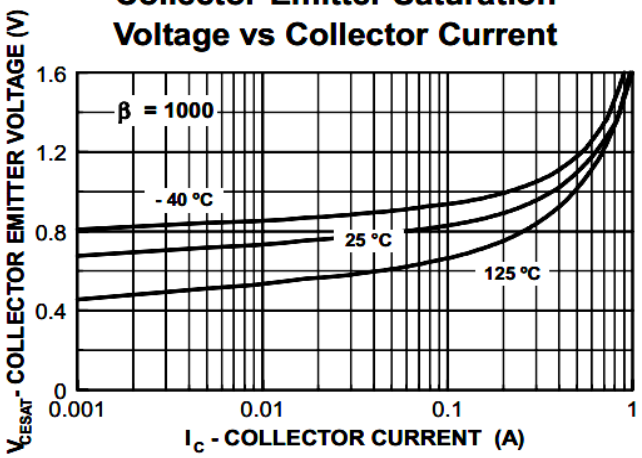
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C = -10μA, I_E = 0	-40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C = -10mA, I_B = 0	-30			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E = -100nA, I_C = 0	-10			V
I_{CBO}	Collector cut-off current	V_{CB} = -30V, I_E = 0			-100	nA
I_{EBO}	Emitter cut-off current	V_{EB} = -10V, I_C = 0			-100	nA
$h_{FE(1)}$	DC current gain	V_{CE} = -5V, I_C = -1mA	4000			
$h_{FE(2)}$		V_{CE} = -5V, I_C = -10mA	10000			
$h_{FE(3)}$		V_{CE} = -5V, I_C = -100mA	20000			
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C = -100mA, I_B = -0.1mA			1.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C = -100mA, I_B = -0.1mA			1.5	V
f_T	Transition frequency	V_{CE}=-5V,I_C=-30mA,f=100MHz		220		MHz
Cc	Collector Capacitance	V_{CB} = 30V, I_E = 0, f = 1.0MHz		3.5		pF

Typical Characteristics

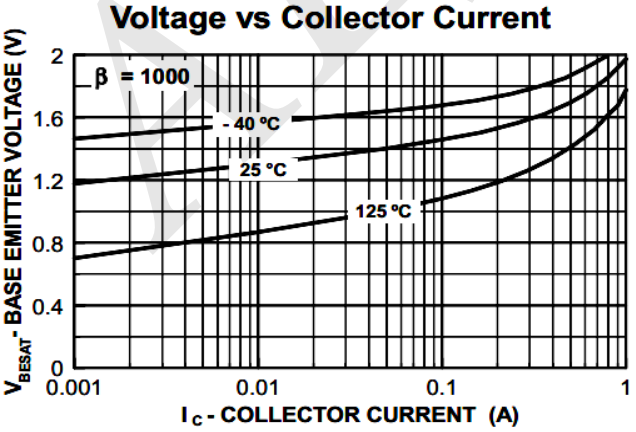
Typical Pulsed Current Gain vs Collector Current



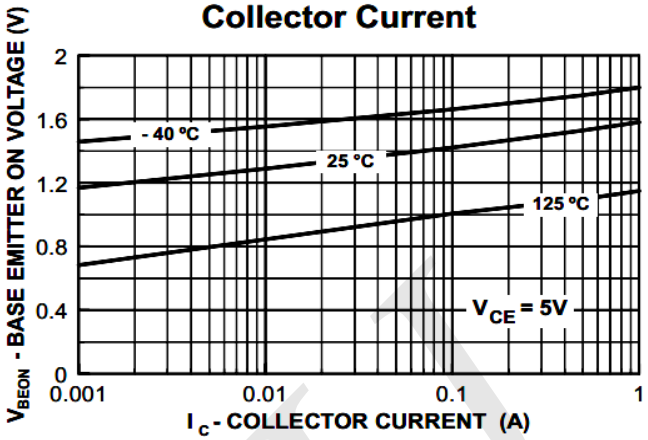
Collector-Emitter Saturation Voltage vs Collector Current



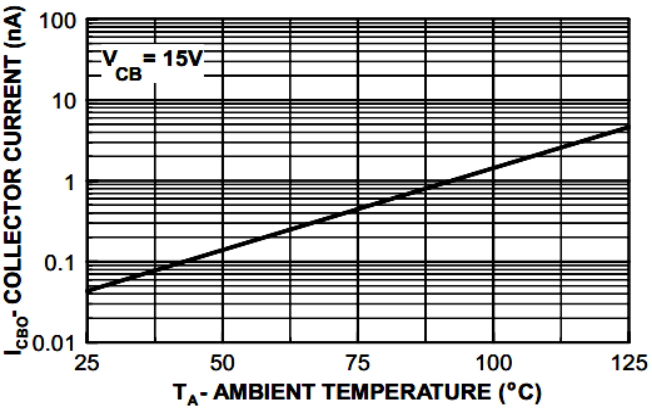
Base-Emitter Saturation Voltage vs Collector Current



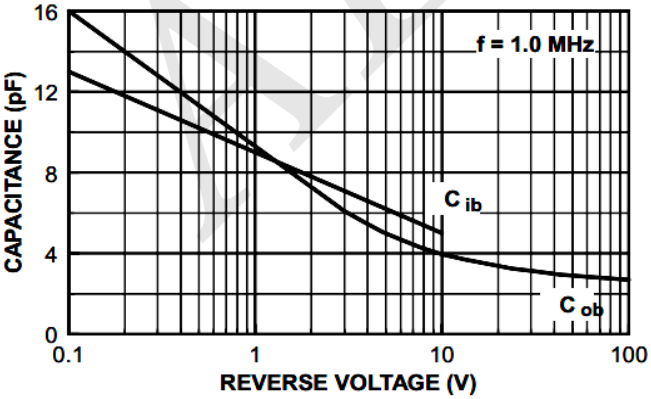
Base Emitter ON Voltage vs Collector Current



Collector-Cutoff Current vs. Ambient Temperature



Input and Output Capacitance vs Reverse Bias Voltage



Power Dissipation vs Ambient Temperature