

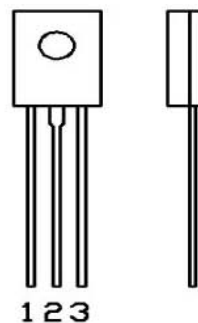
TO-126 Plastic-Encapsulate Transistors

C5027S TRANSISTOR (NPN)

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	VCBO	700	V
Collector-Emitter Voltage	VCEO	600	V
Emitter-Base voltage	VEBO	9	V
Collector Current	Ic	2	A
Collector Power Dissipation	Pc	1.25	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

TO-126



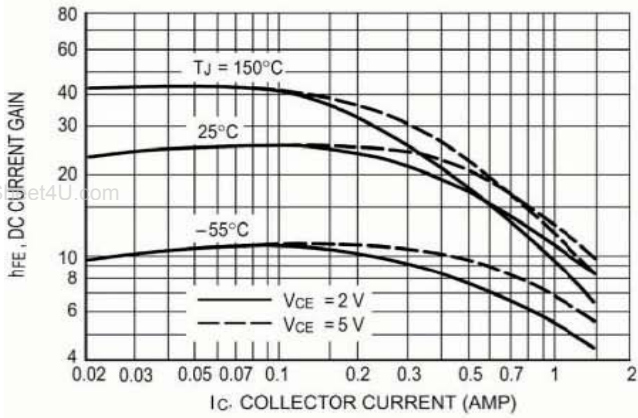
1. Base
2. Collector
3. Emitter

ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

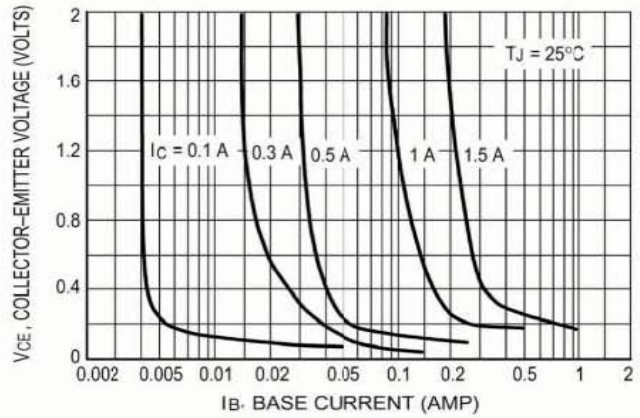
Characteristic	Symbol	Test conditions	MIN	TYP	MAX	Unit
Collector -base breakdown voltage	V(BR)CBO	Ic=1000μA, IE=0	700			V
*Collector -emitter Sustaining Voltage	V(BR)CEO	Ic=10mA, IB=0	600			V
Emitter cut-off current	IEBO	VEB= 9 V, IC=0			1000	μA
DC current gain	HFE (1) HFE (2)	VCE=2V, IC=0.5A VCE=10V, IC=0.5m A	8 5		40	
Collector -emitter saturation voltage	VCE(sat)	IC=1000m A, IB= 250 m A			1	V
Base-emitter saturation voltage	VBE(sat)	IC=1000m A, IB= 250m A			1.2	V
Base Emitter Voltage	VBE(ON)	IE= 2000 m A			3	V
Current Gain Bandwidth Product	ft	VCE=10V, Ic=100mA f=1MHz	5			MHZ
Turn On Time	TON	Ic=1A, IB1=IB2=0.2A VCC=100V				μs
Storage Time	ts				0.5	μs
Fall Time	tf				0.5	μs

Typical Characteristics

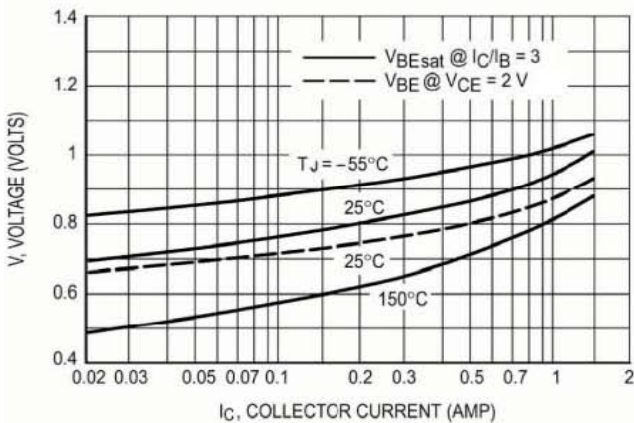
C5027S



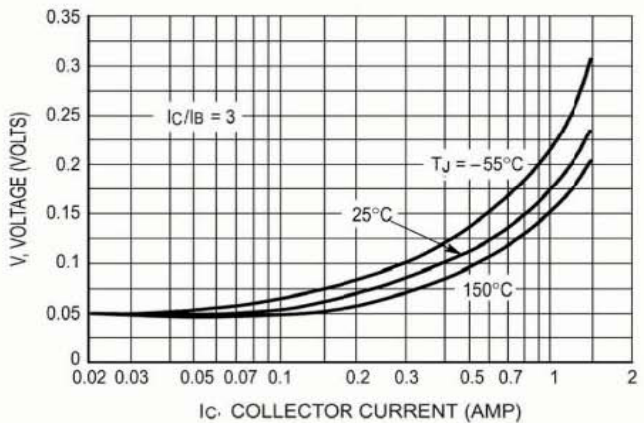
DC Current Gain



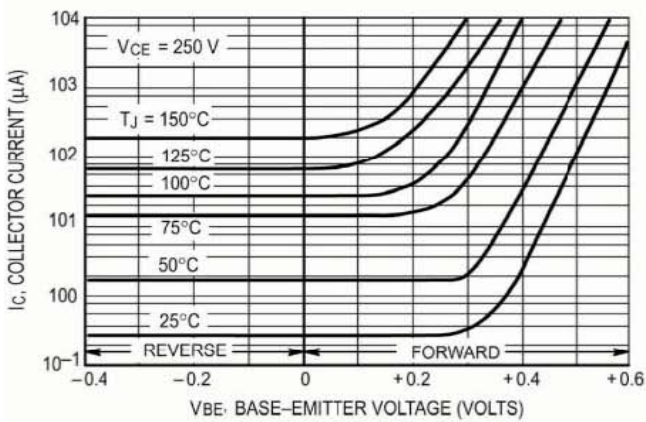
Collector Saturation Region



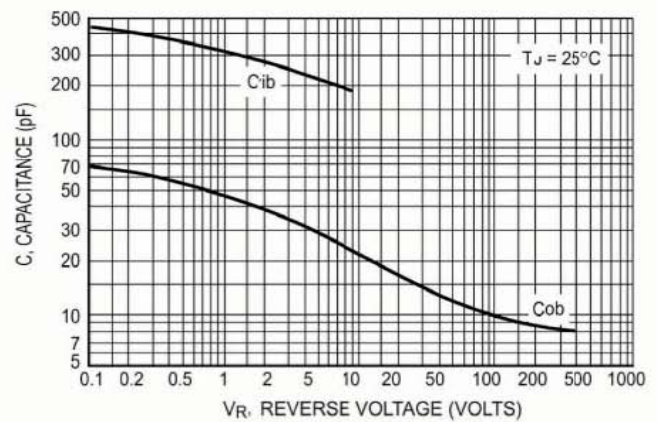
Base-Emitter Voltage



Collector-Emitter Saturation Region



Collector Cutoff Region



Capacitance