2N6426, 2N6427

2N6426 is a Preferred Device

Darlington Transistors

NPN Silicon

Features

- These are Pb−Free Devices*

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector − Emitter Voltage	V_{CEO}	40	Vdc
Collector − Base Voltage	V_{CBO}	40	Vdc
Emitter − Base Voltage	V_{EBO}	12	Vdc
Collector Current − Continuous	I_C	500	mAdc
Total Device Dissipation @ T_A = 25°C Derate above 25°C	P_D	625 5.0	mW mW/°C
Total Device Dissipation @ T_C = 25°C Derate above 25°C	P_D	1.5 12	W mW/°C

March, 2007 − Rev. 3

Publication Order Number:
2N6426/D

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic		Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS						
Collector−Emitter Breakdown Voltage, (Note 1) (I_C = 10 mAdc, V_{BE} = 0)		$V_{(BR)CEO}$	40	−	−	Vdc
Collector−Base Breakdown Voltage (I_C = 100 μAdc, I_E = 0)		$V_{(BR)CBO}$	40	−	−	Vdc
Emitter−Base Breakdown Voltage (I_E = 10 μAdc, I_C = 0)		$V_{(BR)EBO}$	12	−	−	Vdc
Collector Cutoff Current (V_{CE} = 25 Vdc, I_B = 0)		I_{CES}	−	−	1.0	μAdc
Collector Cutoff Current (V_{CB}= 30 Vdc, I_E = 0)		I_{CBO}	−	−	50	nAdc
Emitter Cutoff Current (V_{EB}= 10 Vdc, I_C = 0)		I_{EBO}	−	−	50	nAdc
ON CHARACTERISTICS						
DC Current Gain, (Note 1)		h_{FE}				−
(I_C = 10 mAdc, V_{CE} = 5.0 Vdc)	2N6426		20,000	−	200,000	
	2N6427		10,000	−	100,000	
(I_C = 100 mAdc, V_{CE} = 5.0 Vdc)	2N6426		30,000	−	300,000	
	2N6427		20,000	−	200,000	
(I_C = 500 mAdc, V_{CE} = 5.0 Vdc)	2N6426		20,000	−	200,000	
	2N6427		14,000	−	140,000	
Collector−Emitter Saturation Voltage		$V_{CE(sat)}$				Vdc
			−	0.71	1.2	
			−	0.9	1.5	

V

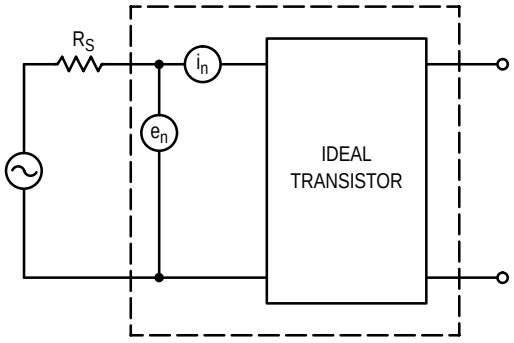
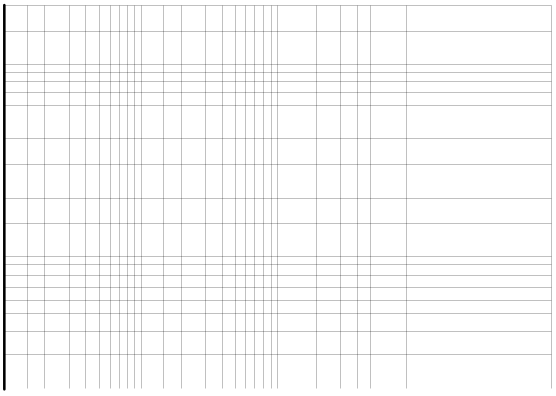
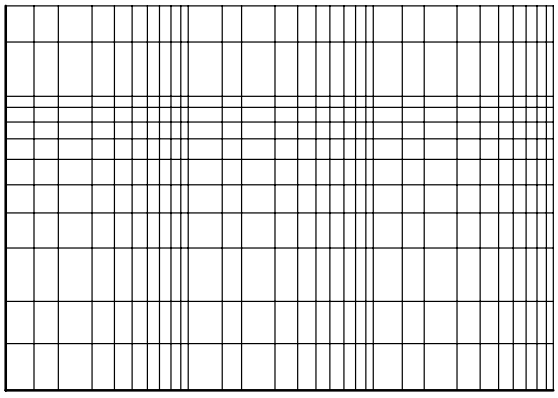


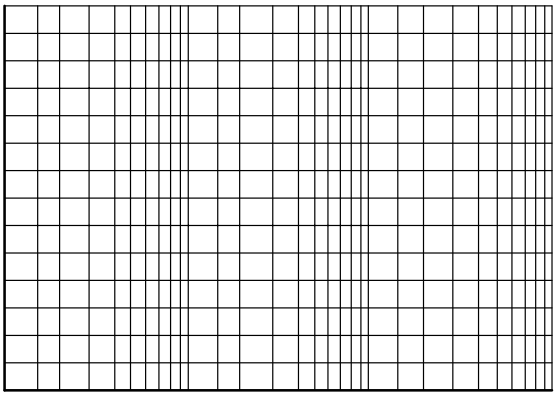
Figure 1. Transistor Noise Model

NOISE CHARACTERISTICS

(V_{CE} = 5.0 Vdc, T_A = 25°C)e002007283(1m1 TDk)- f1NT84.59293TD3(10)Tj83684392959







SMALL−SIGNALCHARACTERISTICS

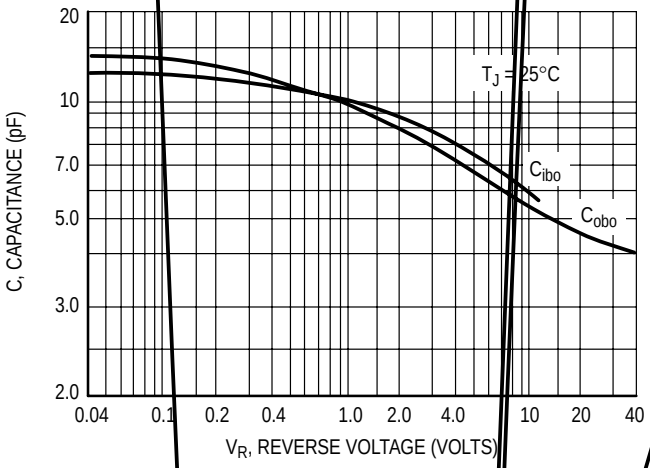


Figure 6. Capacitance

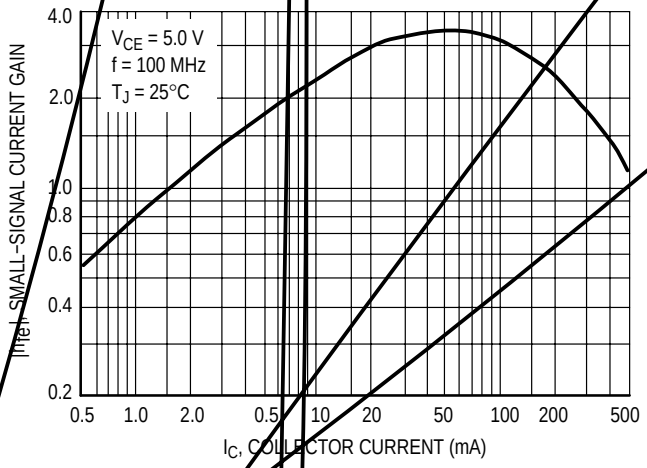


Figure 7. High Frequency Current Gain

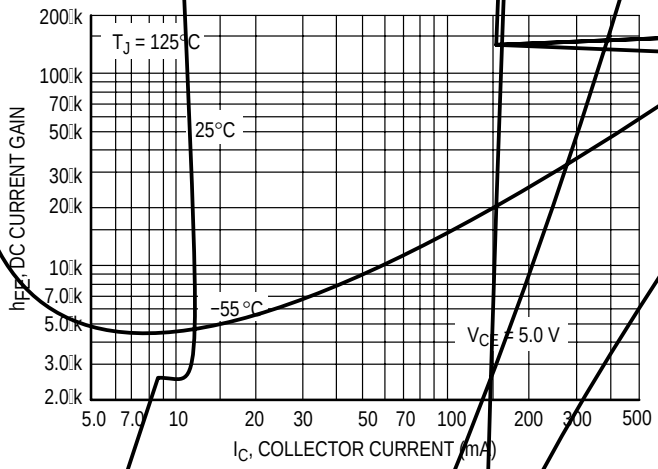


Figure 8. DC Current Gain

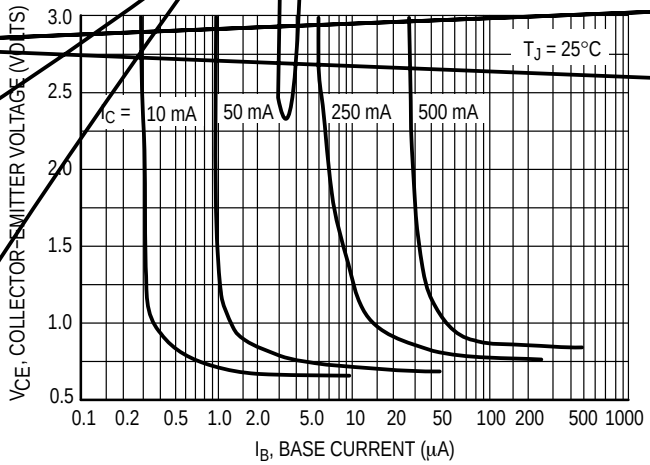


Figure 9. Collector Saturation Region

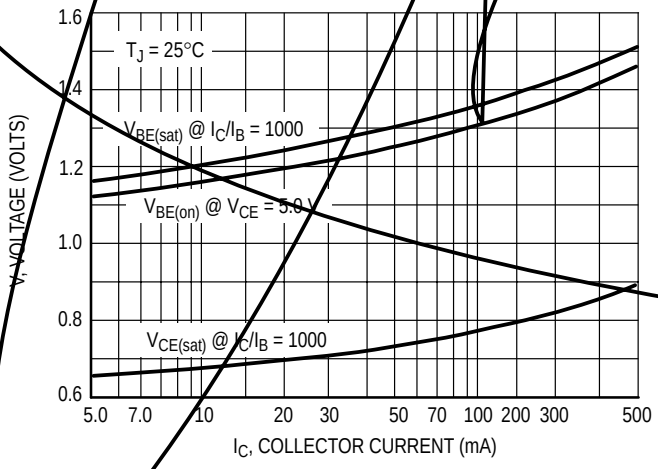


Figure 10. “On” Voltages

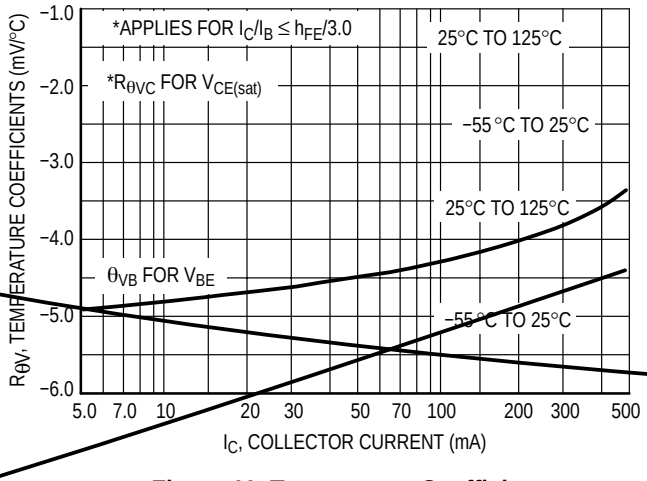


Figure 11. Temperature Coefficients