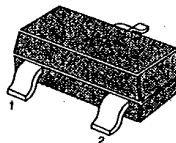


MMBT6427**NPN EPITAXIAL SILICON TRANSISTOR****DARLINGTON TRANSISTOR****ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	40	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	12	V
Collector Current	I _C	500	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{stg}	150	°C

SOT-23

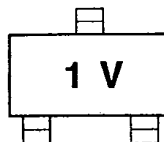


1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS (T_a = 25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C = 100μA, I _E = 0	40		V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = 10mA, I _B = 0	40		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = 10μA, I _C = 0	12		V
Collector Cutoff Current	I _{CBO}	V _{CB} = 30V, I _E = 0		50	nA
Collector Cutoff Current	I _{CEO}	V _{CE} = 25V, I _B = 0		1	μA
Emitter Cutoff Current	I _{EBO}	V _{BE} = 10V, I _C = 0		50	nA
DC Current Gain	h _{FE}	V _{CE} = 5V, I _C = 10mA	10,000	100,000	
		V _{CE} = 5V, I _C = 100mA	20,000	200,000	
		V _{CE} = 5V, I _C = 500mA	14,000	140,000	
Collector-Emitter Saturation Voltage	V _{CE (sat)}	I _C = 50mA, I _B = 0.5mA		1.2	V
		I _C = 500mA, I _B = 0.5mA		1.5	V
Base-Emitter Saturation Voltage	V _{BE (sat)}	I _C = 500mA, I _B = 0.5mA		2.0	V
Base-Emitter On Voltage	V _{BE (on)}	I _C = 50mA, V _{CE} = 5V		1.75	V
Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0		7	pF
Noise Figure	NF	f = 1MHz		10	dB
		I _C = 1mA, V _{CE} = 5V			
		R _S = 100KΩ			
		f = 1KHz to 15.7KHz			

Marking

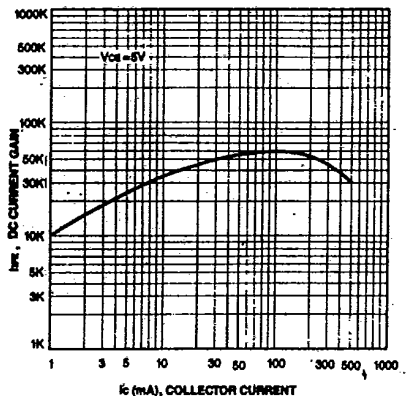


MMBT6427

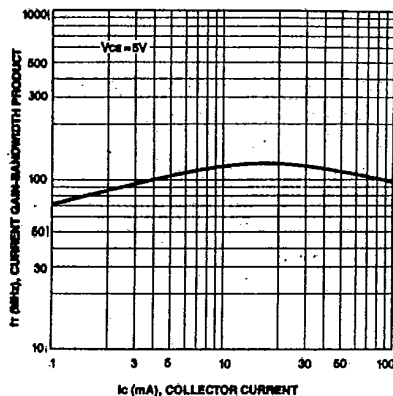
NPN EPTAXIAL SILICON TRANSISTOR

T-29-29

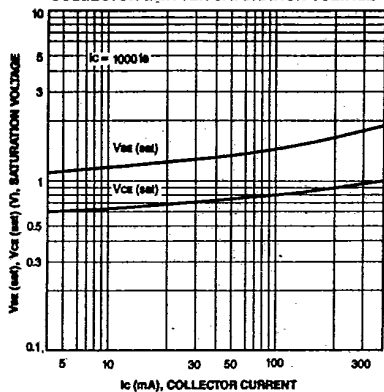
DC CURRENT GAIN



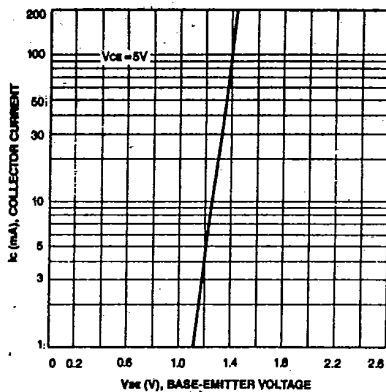
CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



BASE-EMITTER ON VOLTAGE



3