



SEMI CONDUCTOR

MMBT6428LT1

Shandong Yiguang Electronic Joint stock Co., Ltd

TECHNICAL DATA

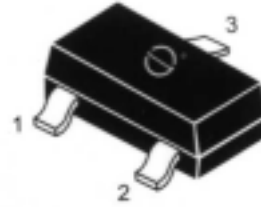
NPN EPITAXIAL SILICON TRANSISTOR

Amplifier Transistors

ABSOLUTE MAXIMUM RATINGS at Ta=25

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	60	V
Collector-Emitter Voltage	Vceo	50	V
Emitter-Base Voltage	Vebo	6	V
Collector Current	Ic	200	mA
Collector Dissipation Ta=25 *	P _D	225	mW
Junction Temperature	T _j	150	
Storage Temperature	T _{stg}	-55-150	

Package:SOT-23



PIN:	1	2	3
STYLE			
NO.1	B	E	C

ELECTRICAL CHARACTERISTICS at Ta=25

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	60			V	Ic=100uA Ie=0
Collector-Emitter Breakdown Voltage#	BVceo	50			V	Ic= 1mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	6			V	Ie= 100uA Ic=0
Collector-Base Cutoff Current	Icbo			100	nA	Vcb= 30V Ie=0
DC Current Gain	Hfe	250		650		Vce= 5V Ic= 0.1mA
Collector-Emitter Saturation Voltage	Vce(sat)			0.2	V	Ic= 10mA Ib= 0.5mA
Output Capacitance	Cob			3	PF	Vcb= 10V Ie=0 f=1MHz
Current Gain-Bandwidth Product	f _T	100		700	MHz	Vce= 5V Ic= 1mA f=100MHz

* Total Device Dissipation : FR=1x0.75x0.062in Board,Derate 25 .

Pulse Test : Pulse Width 300uS,Duty cycle 2%

DEVICE MARKING:

MMBT6428LT1=1KM



MMBT6428LT1

NOISE CHARACTERISTICS

($V_{CE} = 5.0 \text{ Vdc}$, $T_A = 25^\circ\text{C}$)

NOISE VOLTAGE

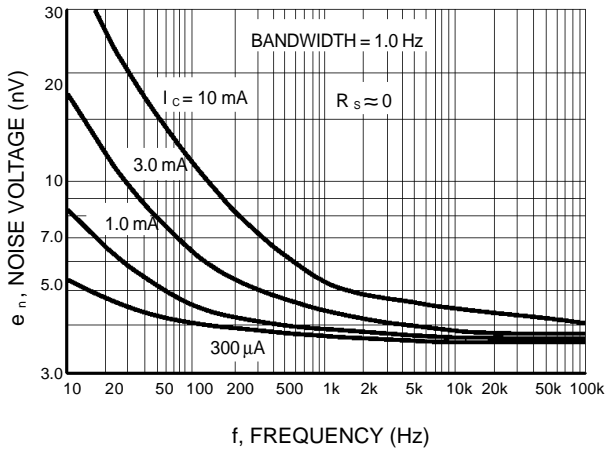


Figure 2. Effects of Frequency

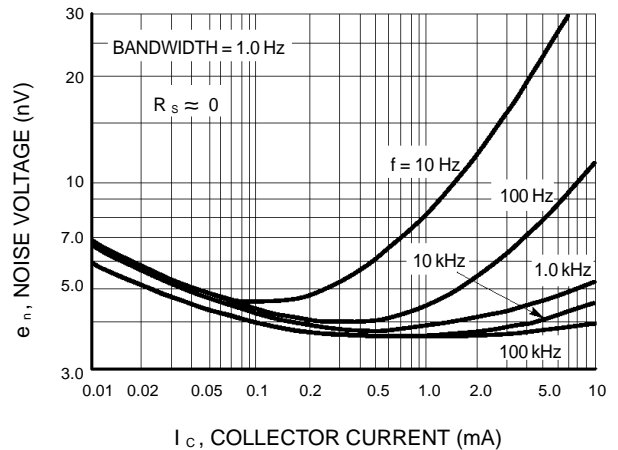


Figure 3. Effects of Collector Current

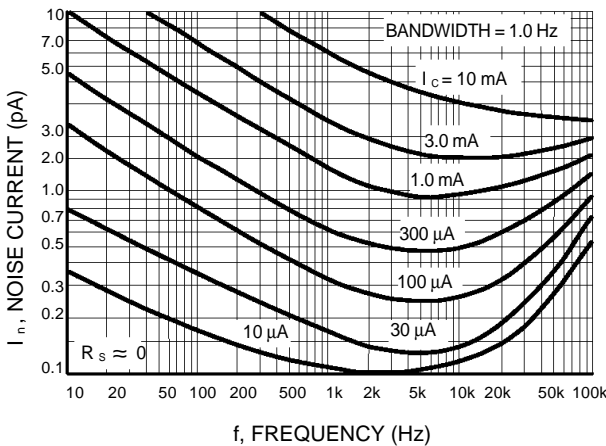


Figure 4. Noise Current

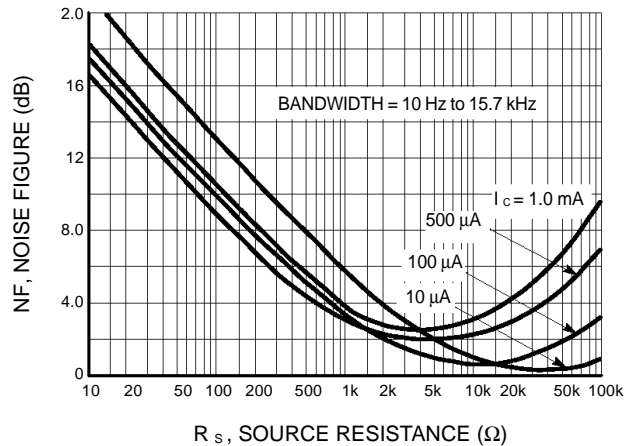


Figure 5. Wideband Noise Figure

100 Hz NOISE DATA

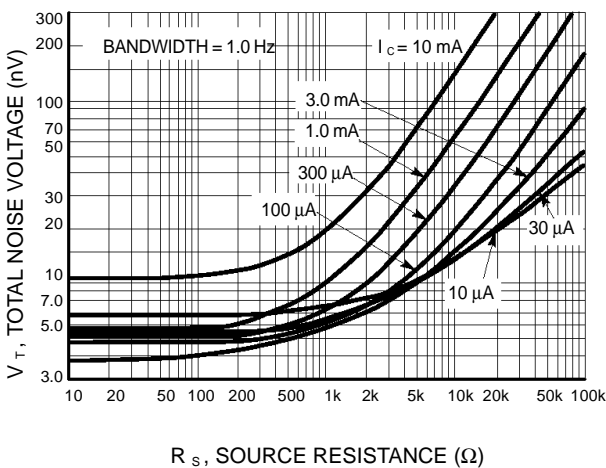


Figure 6. Total Noise Voltage

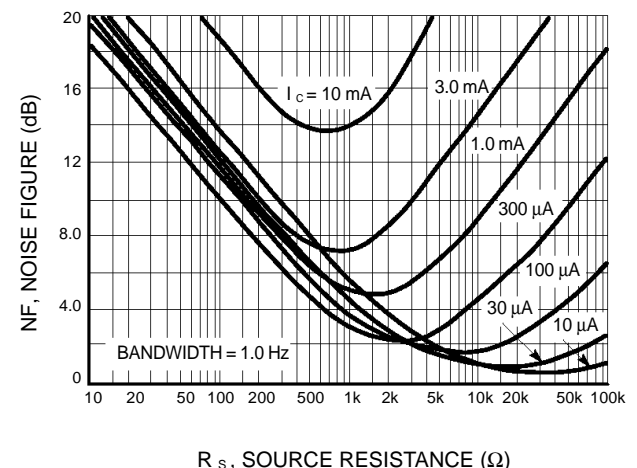


Figure 7. Noise Figure



MMBT6428LT1

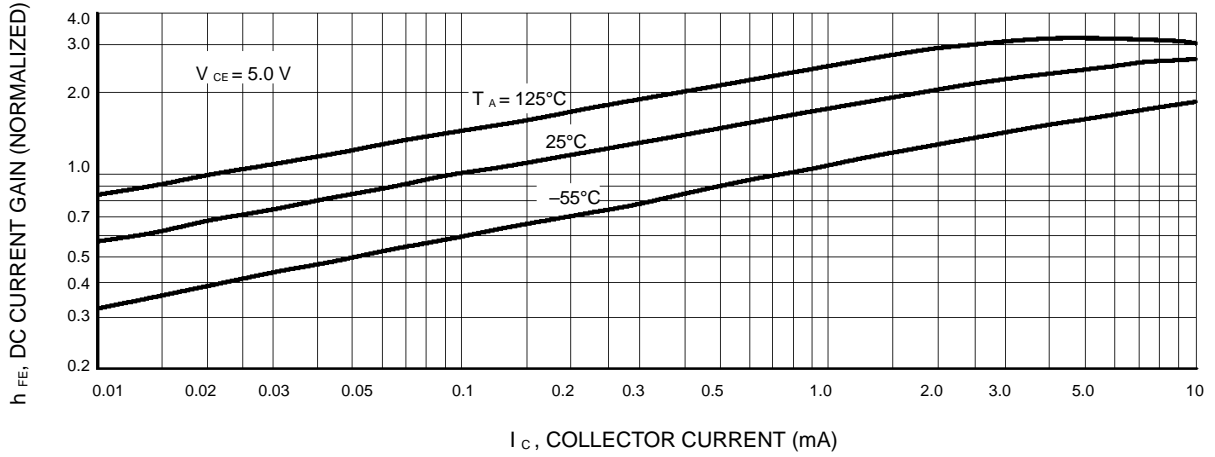


Figure 8. DC Current Gain

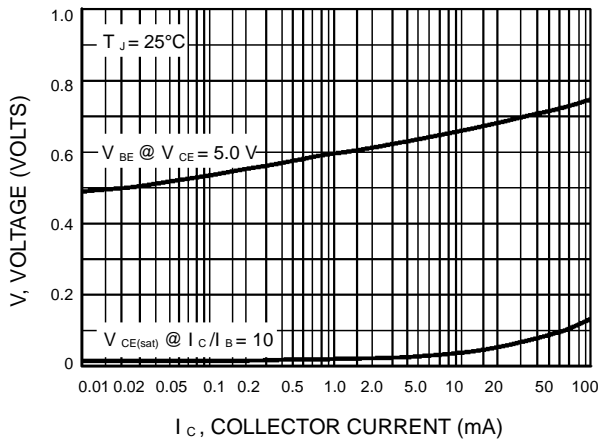


Figure 9. "On" Voltages

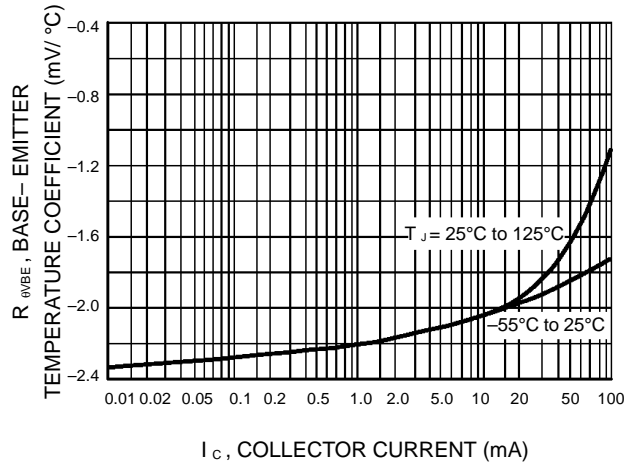


Figure 10. Temperature Coefficients

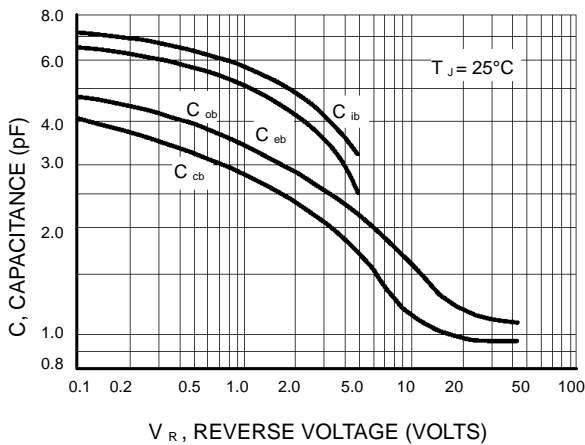


Figure 11. Capacitance

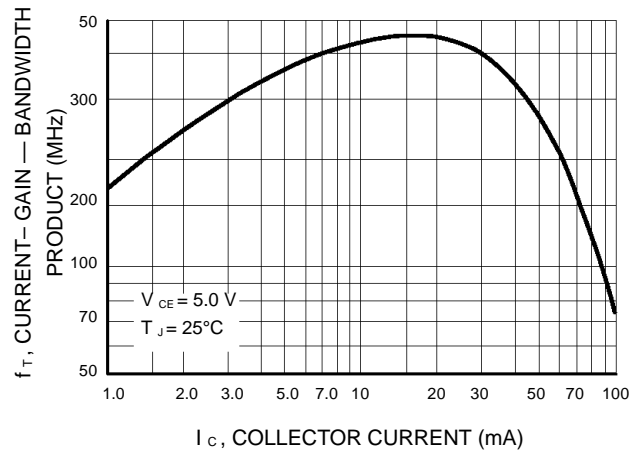


Figure 12. Current-Gain — Bandwidth Product