

ABSOLUTE MAXIMUM RATINGS at Ta=25°C

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V _{ceo}	-45	V
Emitter-Base Voltage	V _{ebo}	-5.0	mA
Collector Current	I _c	-500	mA
Peak Collector Current	I _{CM}	-1000	mA
Peak Emitter Current	I _{EM}	-1000	mA
Power Dissipation at T _{SB} =50°C (Note1)	P _D	310	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-65-150	°C

Package:SOT-23



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

ELECTRICAL CHARACTERISTICS at Ta=25°C

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
DC Current Gain Current Gain Group -16	H _{fe}	100	250			V _{ce} = -1.0V I _c = -100mA
-25		160		400		
-40		250		600		
Current Gain Group-16		60				V _{ce} = -1.0V I _c = -300mA
-25		100				
-40		170				
Collector-Emitter Saturation Voltage	V _{ce(sat)}			-0.7	V	I _c = -500mA I _b = 50mA
Base-Emitter Voltage	V _{be}			-1.2	V	V _{ce} = -1.0V I _c = -300mA
Collector-Emitter Cutoff Current	I _{ces}			-100	nA	V _{ce} = -45V
				-5.0	uA	V _{ce} = -25V, T _j =150°C
Emitter-Base Cutoff Current	I _{ebo}			100	nA	V _{eb} =4.0V
Gain Bandwidth Product	f _T	100			MHz	V _{ce} = -5V I _c = -10mA f=50MHz
Collector-Base Capacitance	C _{cbo}			12	pF	V _{cb} = -10V f=1.0MHz

Note1: Device mounted on ceramic substrate 0.7mm x 2.5mm² area. DEVICE

MARKING:

BC807-16L T1=5A

BC807-25L T1=5B

BC807-40L T1=5C

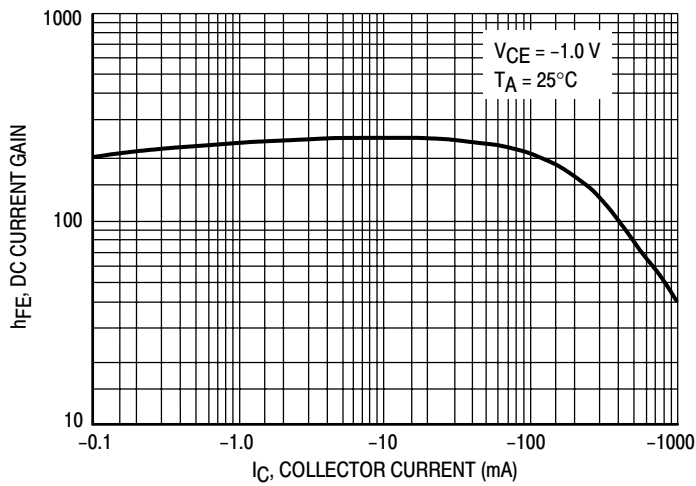


Figure 1. DC Current Gain

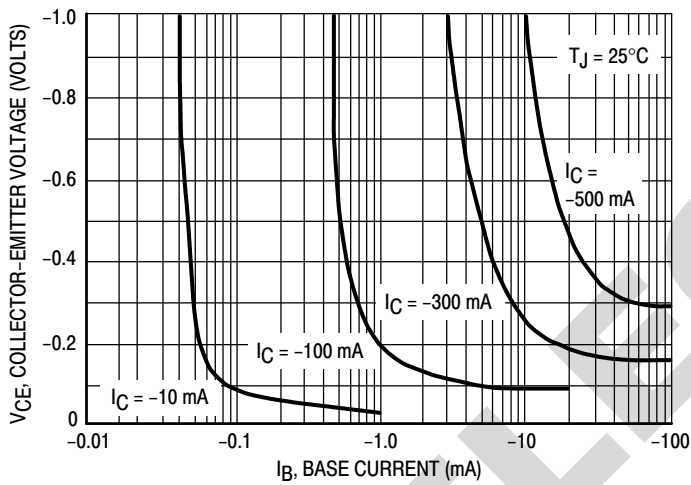


Figure 2. Saturation Region

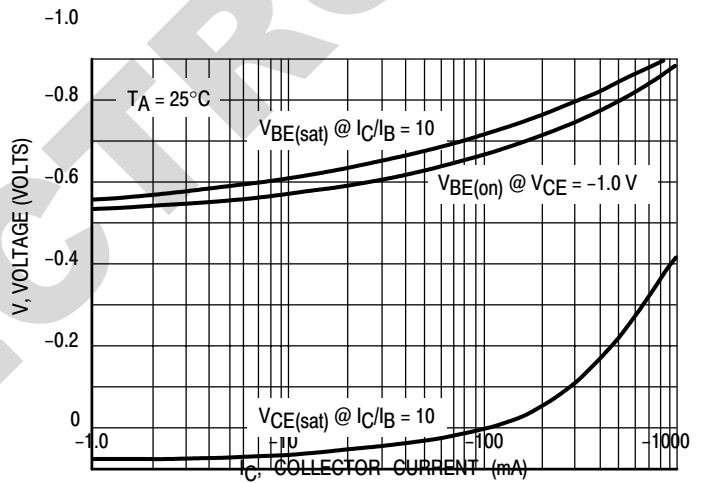


Figure 3. "On" Voltages

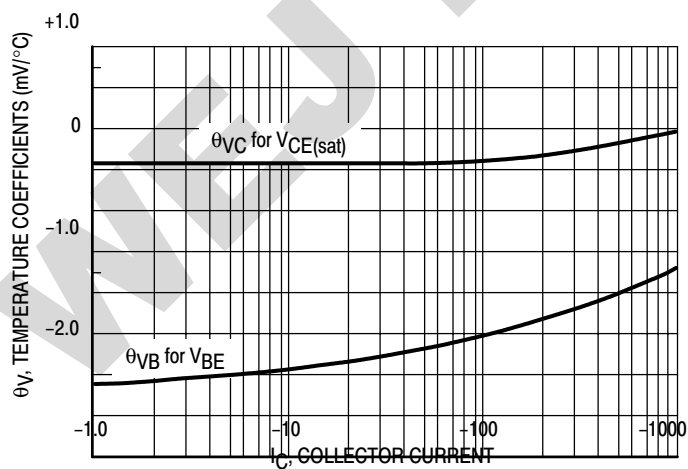


Figure 4. Temperature Coefficients

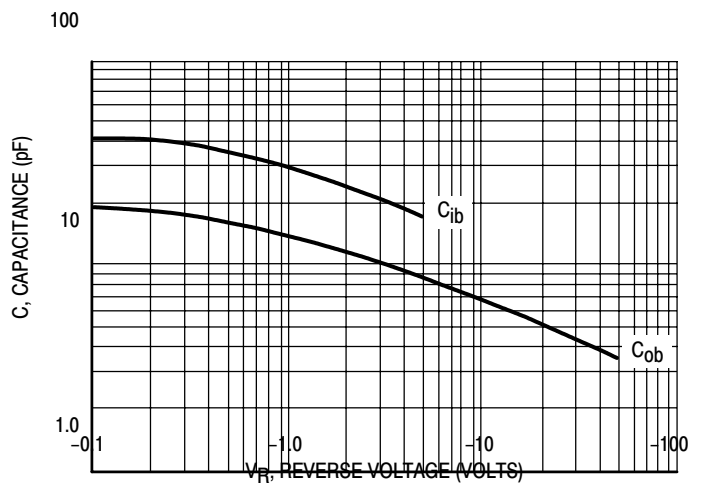
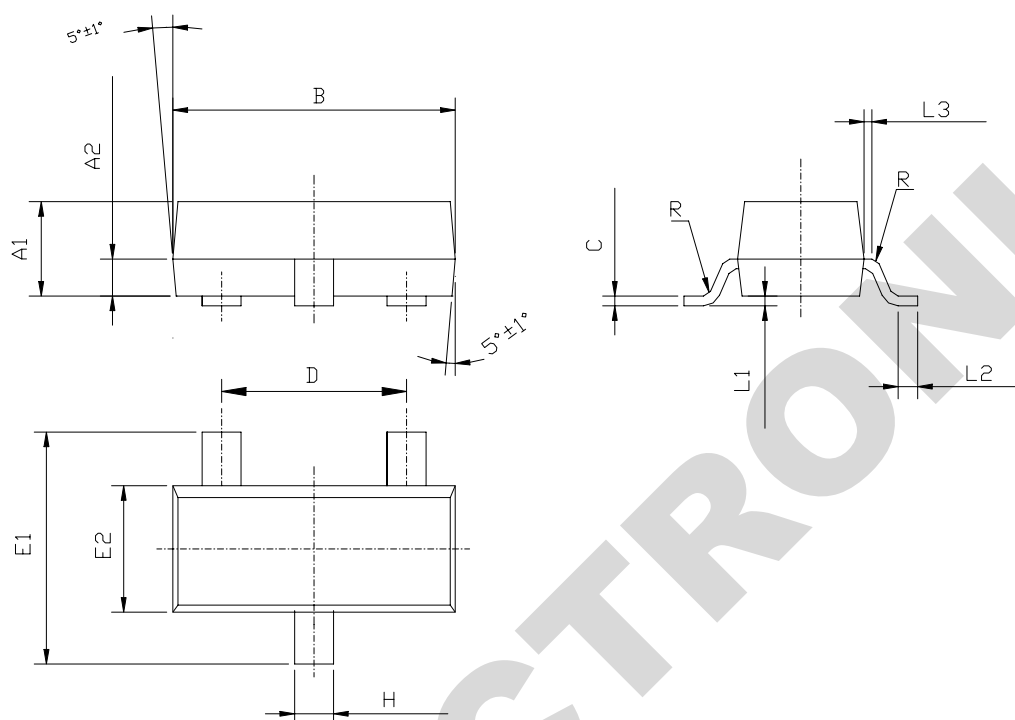


Figure 5. Capacitances

外型尺寸及内部结构图

OUTSIDE DEMENSION AND INTERNAL CONFIGURATION (SOT-23)



Symbol	Dimensions in Millimeters			内部结构 STYLS	管脚 PIN		
	Min	Nominal	Max		1 脚	2 脚	3 脚
A1	0.900	0.970	1.000	6	基极 BASE	发射极 EMITTER	集电极 COLLCTOR
A2	0.350	0.380	0.410				
B	2.800	2.900	3.000	8	阳极 ANODE	不连接 NO- CONNECTION	阴极 CATHODE
C	0.085	0.100	0.150				
D	1.800	1.900	2.000	9	阳极 ANODE	阳极 ANODE	阴极 CATHODE
E1	2.200	2.400	2.600				
E2	1.200	1.300	1.400	11	阳极 ANODE	阴极 CATHODE	阳极-阴极 ANODE-CATHODE
H	0.300	0.400	0.500				
L1	0.000		0.100	12	阴极 CATHODE	阴极 CATHODE	阳极 ANODE
L2	0.200						
L3	0.030	0.080	0.130	18	不连接 NO- CONNECTION	阴极 CATHODE	阳极 ANODE
R	0.080TYP						
				19	阴极 CATHODE	阳极 ANODE	阴极-阳极 CATHODE-ANODE