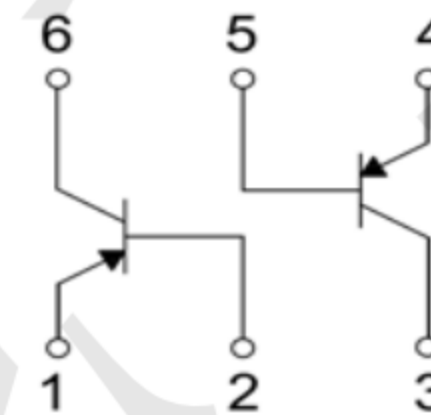




SOT363



Circuit Diagram



**Absolute Maximum Ratings** (Tamb=25°C unless otherwise specified)

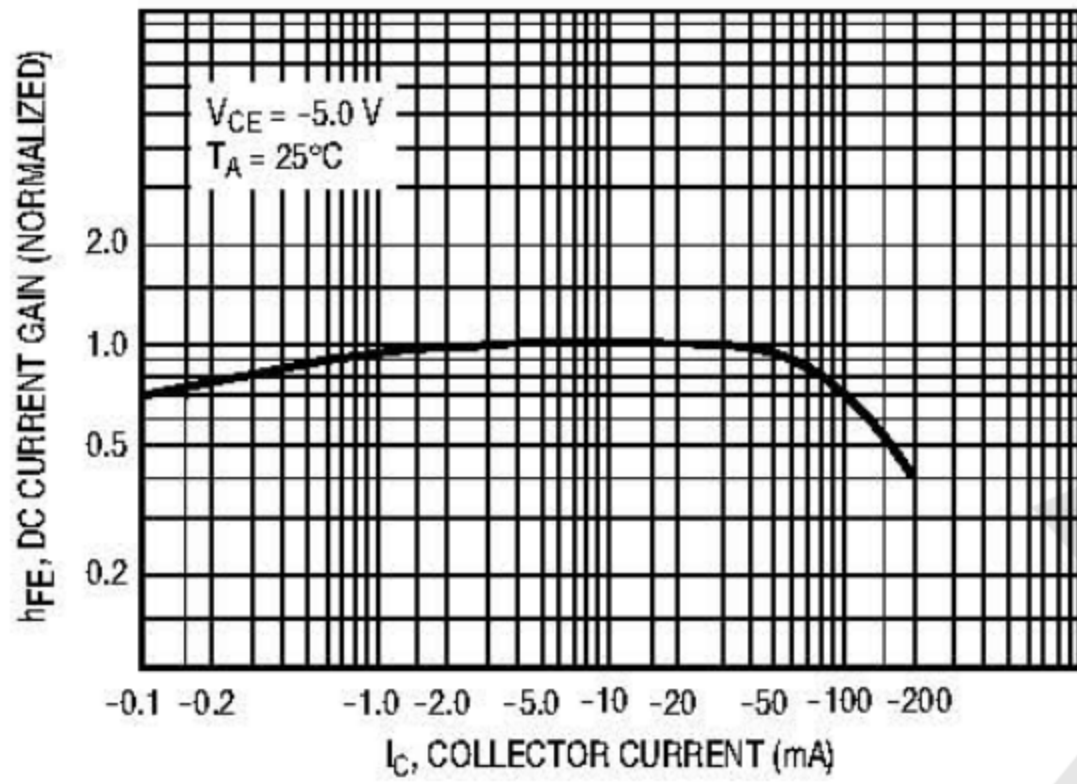
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	80	V
Collector Emitter Voltage	$-V_{CEO}$	65	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	100	mA
Peak Collector Current	$-I_{CM}$	100	mA
Total Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{Stg}$	- 55 to + 150	°C

**Electrical Characteristics NPN 4401 (TA=25°C unless otherwise specified)**

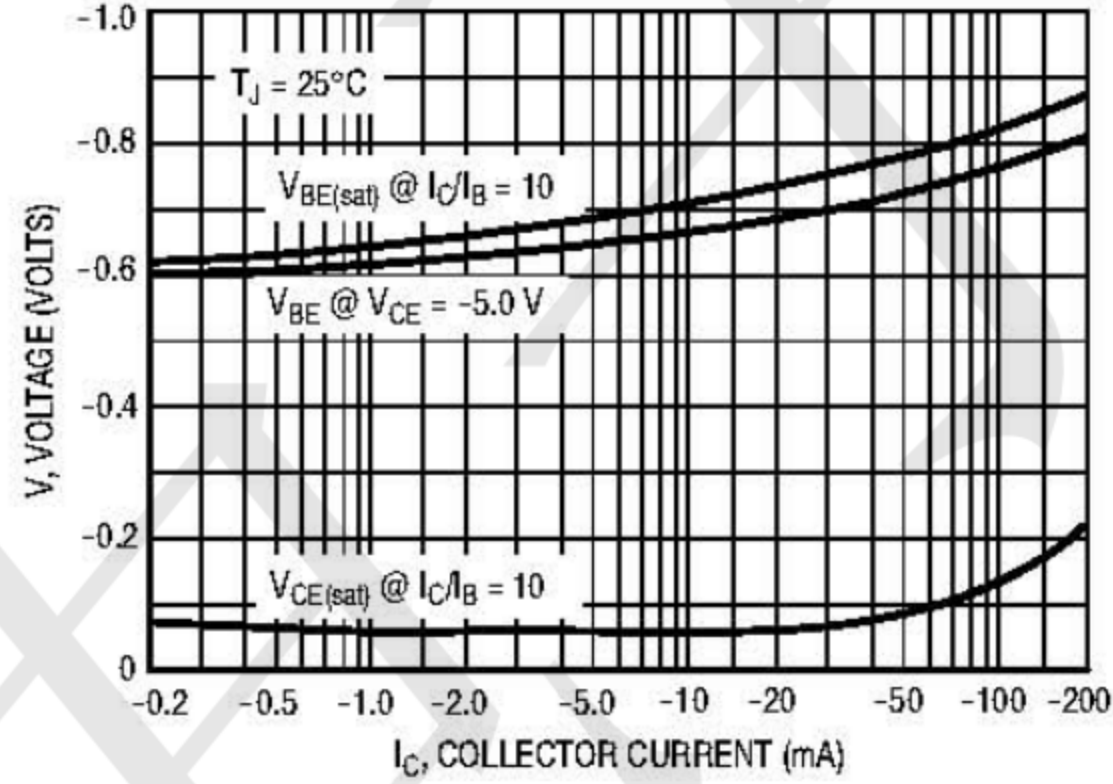
Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 5\text{ V}$ , $-I_C = 2\text{ mA}$	$h_{FE}$	220	475	-
Collector Base Voltage at $-I_C = 10\text{ }\mu\text{A}$	$-V_{CBO}$	80	-	V
Collector Emitter Voltage at $-I_C = 10\text{ mA}$	$-V_{CEO}$	65	-	V
Emitter Base Voltage at $-I_E = 1\text{ }\mu\text{A}$	$-V_{EBO}$	5	-	V
Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	15	nA
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	100	nA
Collector Emitter Saturation Voltage at $-I_C = 10\text{ mA}$ , $-I_B = 0.5\text{ mA}$ $-I_C = 100\text{ mA}$ , $-I_B = 5\text{ mA}$	$-V_{CE(sat)}$	- -	0.3 0.65	V
Base Emitter Voltage at $-V_{CE} = 5\text{ V}$ , $-I_C = 2\text{ mA}$ $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$	$-V_{BE}$	0.6 -	0.75 0.82	V
Transition Frequency at $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$ , $f = 100\text{ MHz}$	$f_T$	100	-	MHz
Output Capacitance at $-V_{CB} = 10\text{ V}$ , $I_E = 0$ , $f = 1\text{ MHz}$	$C_{ob}$	-	4.5	pF



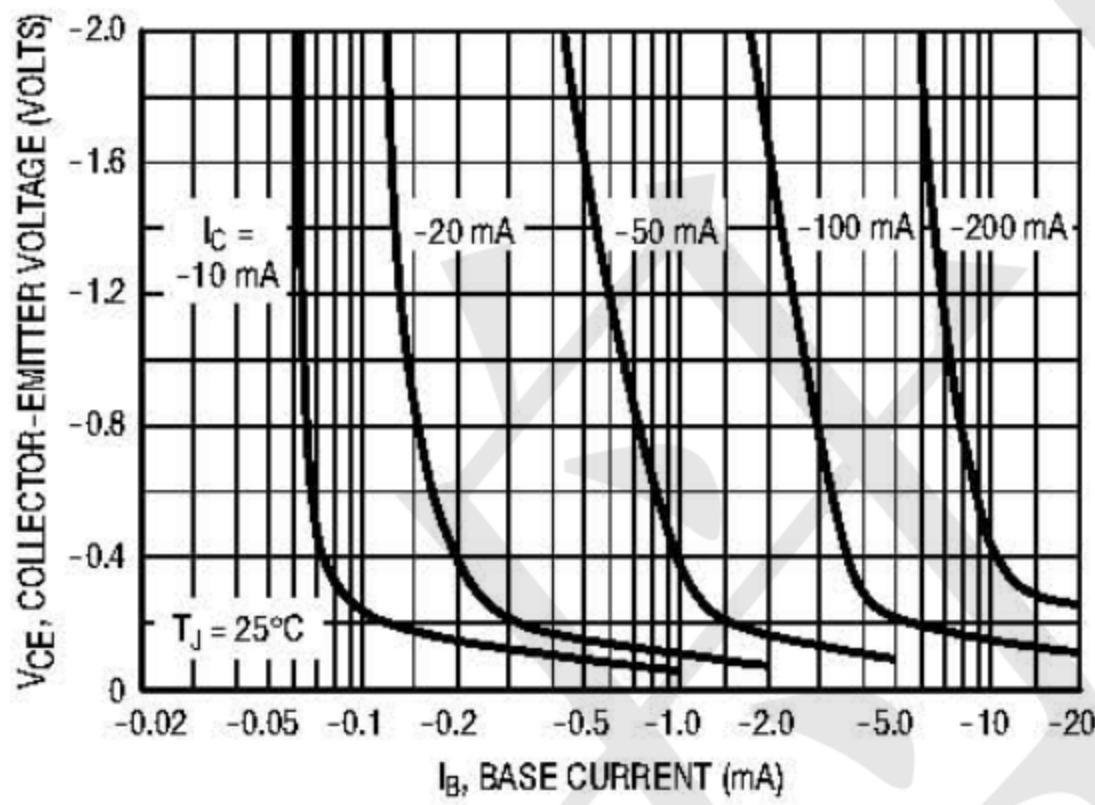
Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)



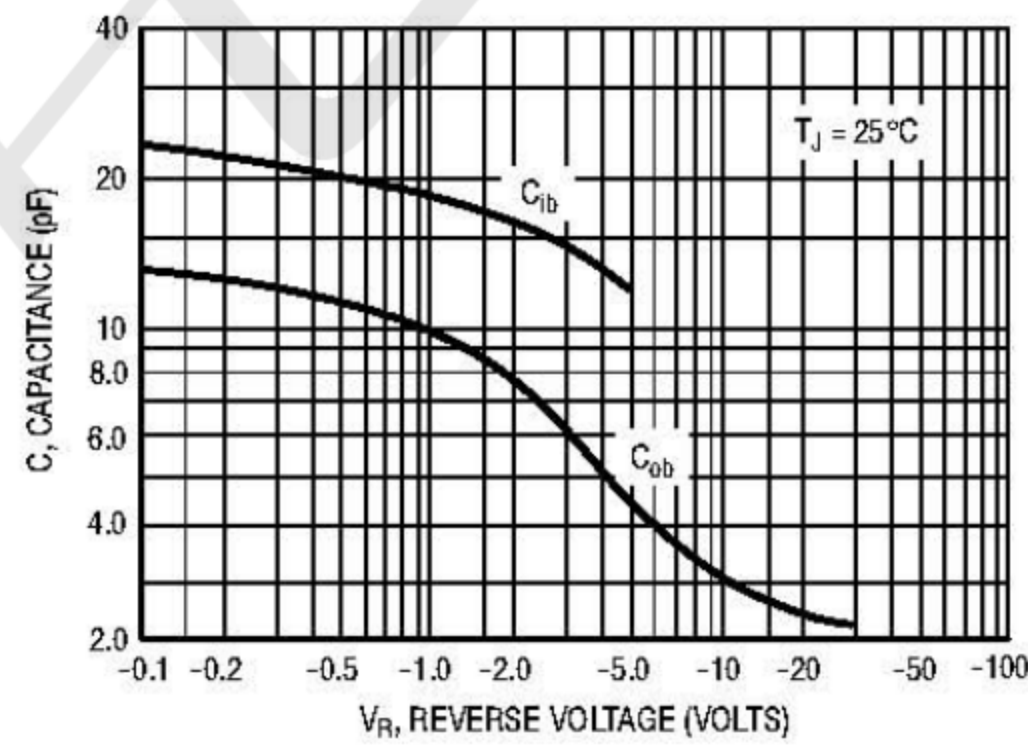
DC Current Gain



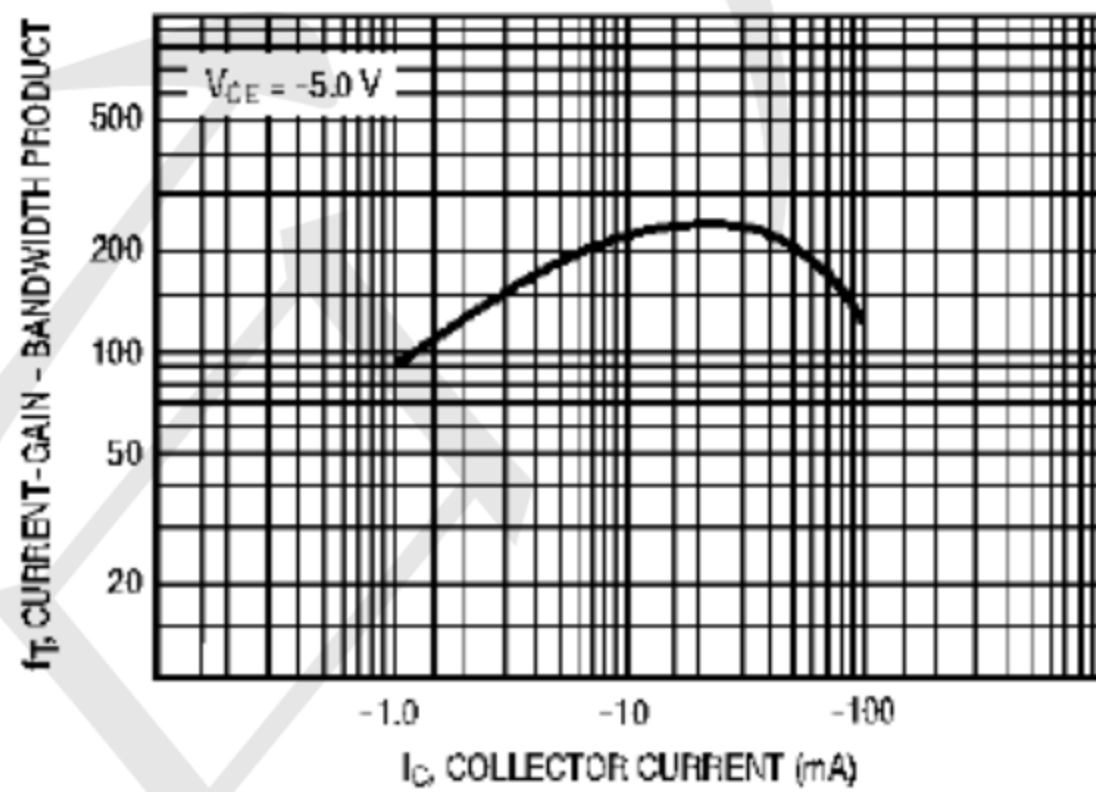
“On” Voltage



Collector Saturation Region



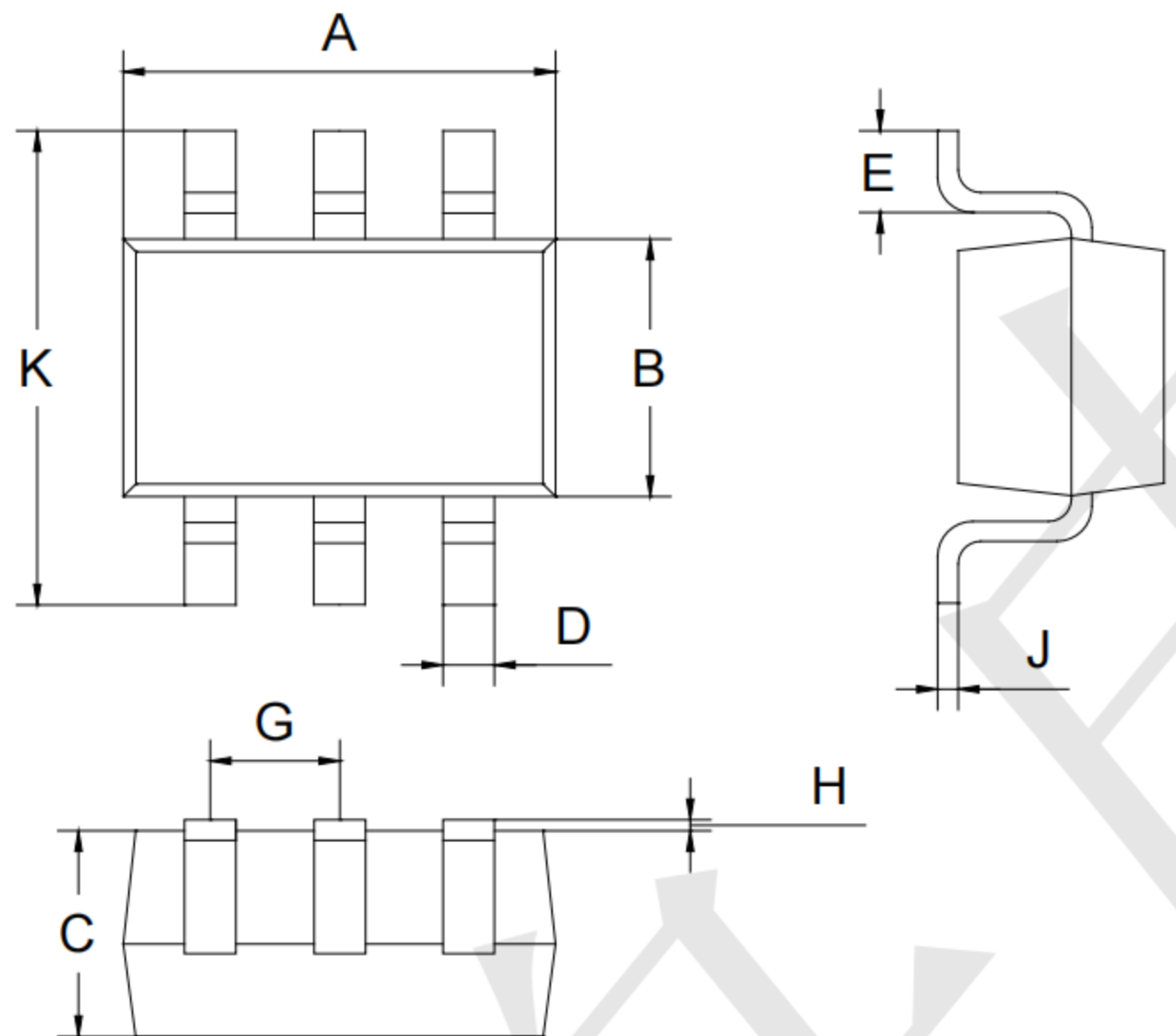
Capacitance



Current-Gain - Bandwidth Product



Outline Drawing - SOT363 (unit: mm)



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout-SOT363 (unit: mm)

