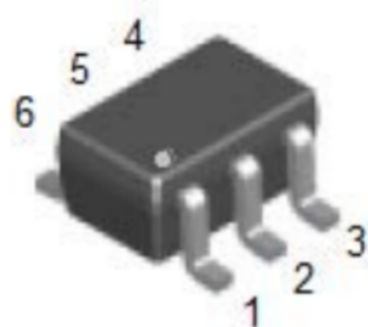


Features

- Epitaxial Planar Die Construction
- Ideal for Low Power Amplification and Switching

Ordering Information

- Case: SOT363
- Shipping Qty:3000/7inch Tape& Reel



SOT363



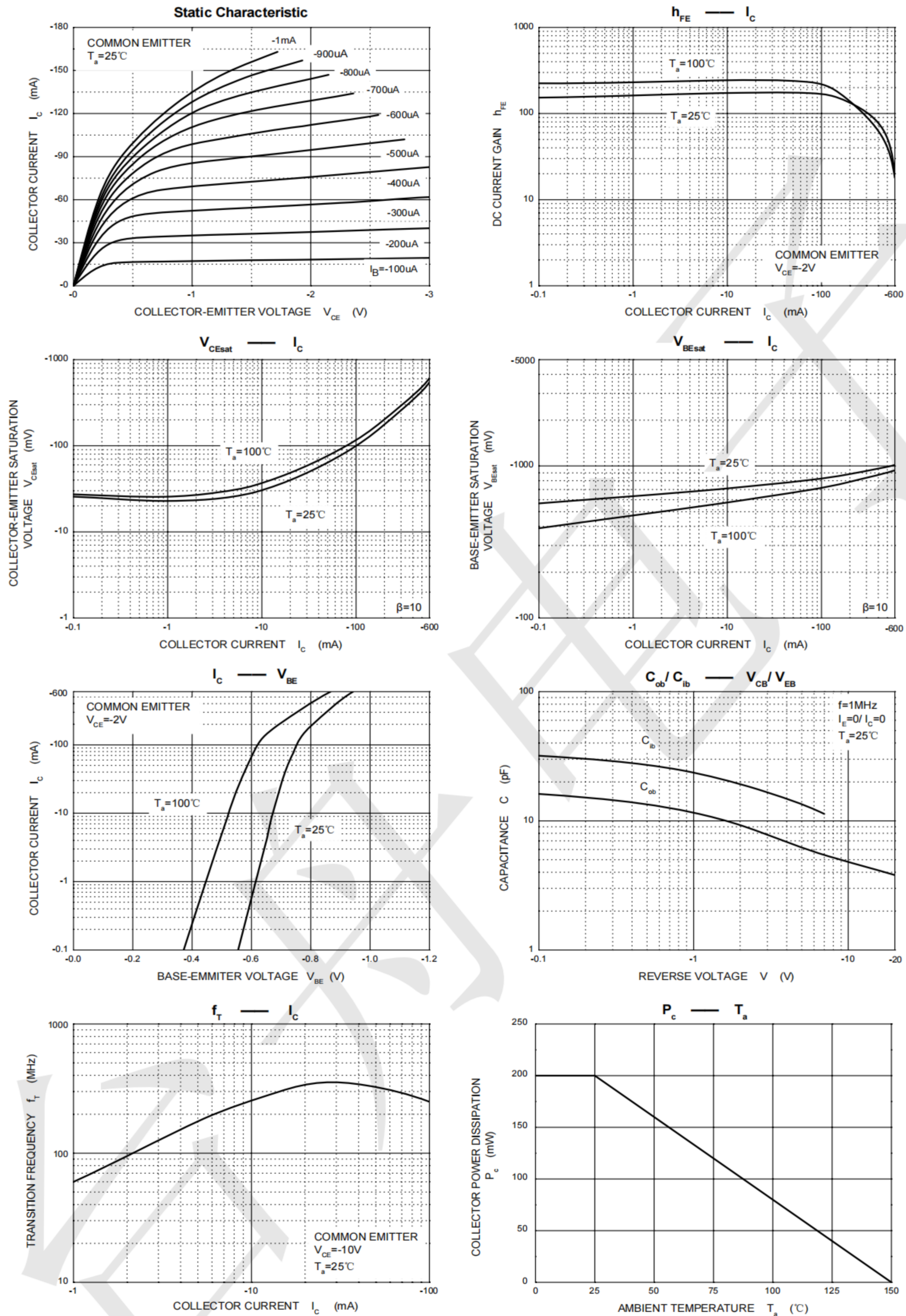
Absolute Maximum Ratings_(T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-40	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.6	A
P _C	Collector Power Dissipation	0.2	W
R _{θJA}	Thermal Resistance from Junction to Ambient	625	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55 to +150	°C

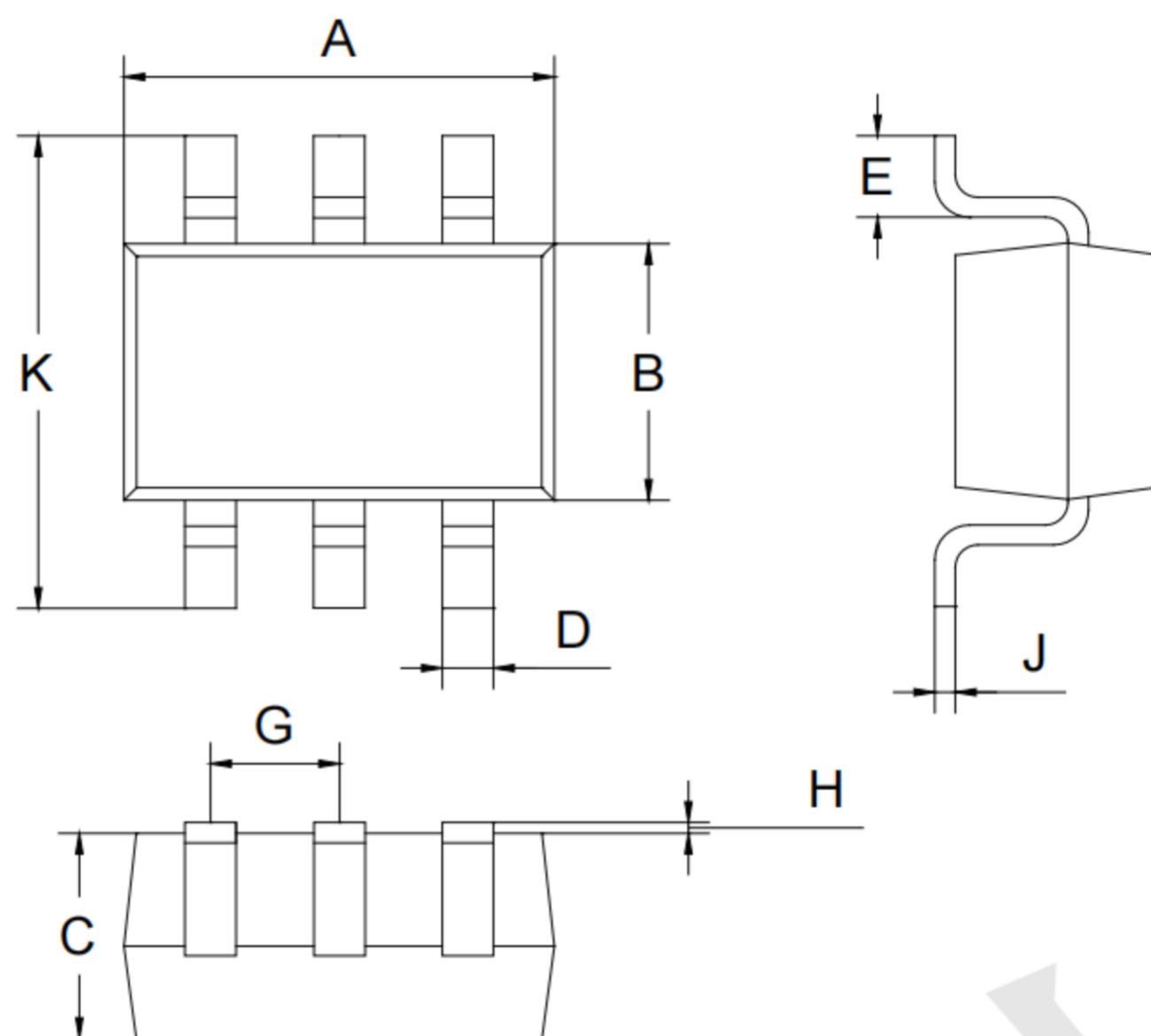
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$, $I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $I_B=0$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$, $I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-50\text{V}$, $I_E=0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-35\text{V}$, $I_B=0$			-0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}$, $I_C=-0.1\text{mA}$	30			
	$h_{FE(2)}$	$V_{CE}=-1\text{V}$, $I_C=-1\text{mA}$	60			
	$h_{FE(3)}$	$V_{CE}=-1\text{V}$, $I_C=-10\text{mA}$	100			
	$h_{FE(4)}$	$V_{CE}=-2\text{V}$, $I_C=-150\text{mA}$	100		300	
	$h_{FE(5)}$	$V_{CE}=-2\text{V}$, $I_C=-500\text{mA}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=-150\text{mA}$, $I_B=-15\text{mA}$			-0.4	V
	$V_{CE(sat)2}$	$I_C=-500\text{mA}$, $I_B=-50\text{mA}$			-0.75	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	$I_C=-150\text{mA}$, $I_B=-15\text{mA}$	-0.75		-0.95	V
	$V_{BE(sat)2}$	$I_C=-500\text{mA}$, $I_B=-50\text{mA}$			-1.3	V
Transition frequency	f_T	$V_{CE}=-10\text{V}$, $I_C=-20\text{mA}$, $f=100\text{MHz}$	200			MHz
Output capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$			8.5	pF
Delay time	t_d	$V_{CC}=-30\text{V}$, $V_{BE}=-2\text{V}$, $I_C=-150\text{mA}$, $I_{B1}=-15\text{mA}$			15	nS
Rise time	t_r				20	nS
Storage time	t_s	$V_{CC}=-30\text{V}$, $I_C=-150\text{mA}$ $I_{B1}=-I_{B2}=-15\text{mA}$			225	nS
Fall time	t_f				30	nS

Typical Electrical Characteristic Curves



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)

