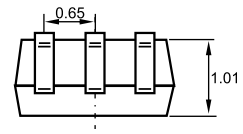
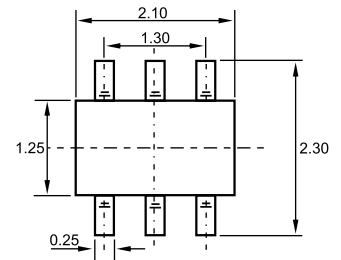


SOT-363



Dimensions in inches and (millimeters)

Features

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

MRKING:K2T

Maximum Ratings (TA = 25°C unless otherwise specified)

Symbol	Parameter	Value	Units
V _{CB0}	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. Junction to Ambient Air	625	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	-40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-40			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-50V, I _E =0			-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =-35V, I _B =0			-0.5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =-1V, I _C = -0.1mA	30			
	h _{FE(2)}	V _{CE} =-1V, I _C = -1mA	60			
	h _{FE(3)}	V _{CE} =-1 V, I _C = -10mA	100			
	h _{FE(4)}	V _{CE} =-2 V, I _C = -150mA	100		300	
	h _{FE(5)}	V _{CE} =-2 V, I _C = -500mA	20			
Collector-emitter saturation voltage	V _{CE(sat)1}	I _C =-150 mA, I _B =-15mA			-0.4	V
	V _{CE(sat)2}	I _C =-500 mA, I _B =-50mA			-0.75	V
Base-emitter saturation voltage	V _{BE(sat)1}	I _C = -150 mA, I _B =-15mA	-0.75		-0.95	V
	V _{BE(sat)2}	I _C = -500 mA, I _B =-50mA			-1.3	V
Transition frequency	f _T	V _{CE} = -10V, I _C =-20mA, f = 100MHz	200			MHz
Output Capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			8.5	pF
Delay time	t _d	V _{CC} =-30V, V _{BE} =-2V, I _C =-150mA,			15	nS
Rise time	t _r	I _{B1} =-15mA			20	nS
Storage time	t _s	V _{CC} =-30V, I _C =-150mA			225	nS
Fall time	t _f	B1=- I _{B2} = -15mA			30	nS



Typical Characteristics

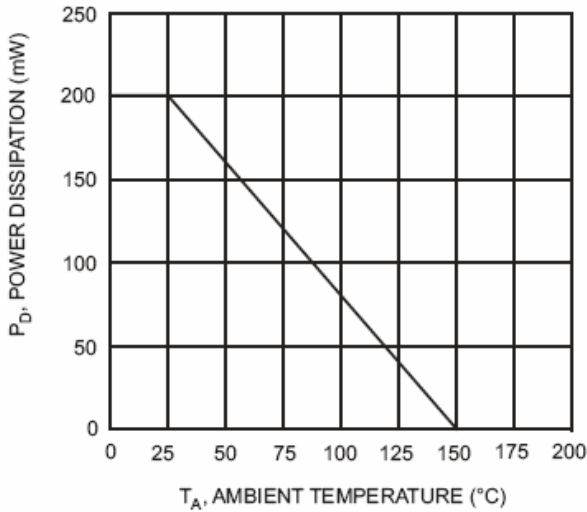


Fig. 1. Max Power Dissipation vs Ambient Temperature

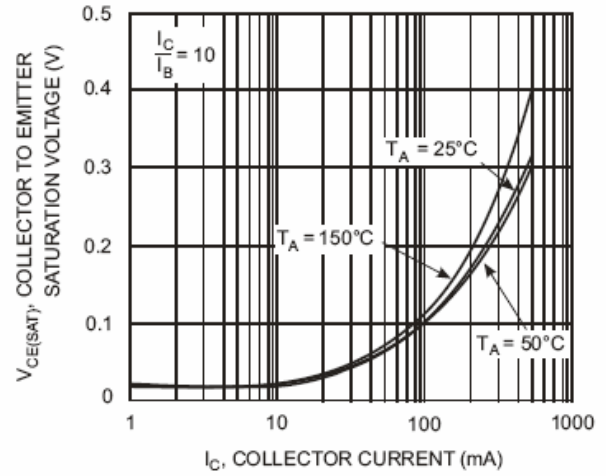


Fig. 2. Collector to Emitter Saturation Voltage vs. Collector Current

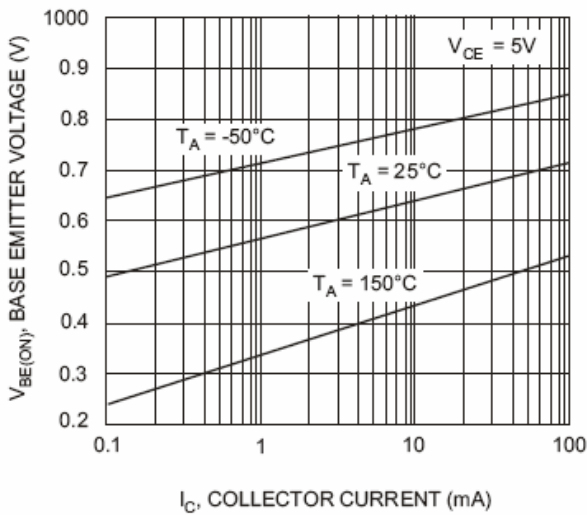


Fig. 3. Base-Emitter Voltage vs. Collector Current

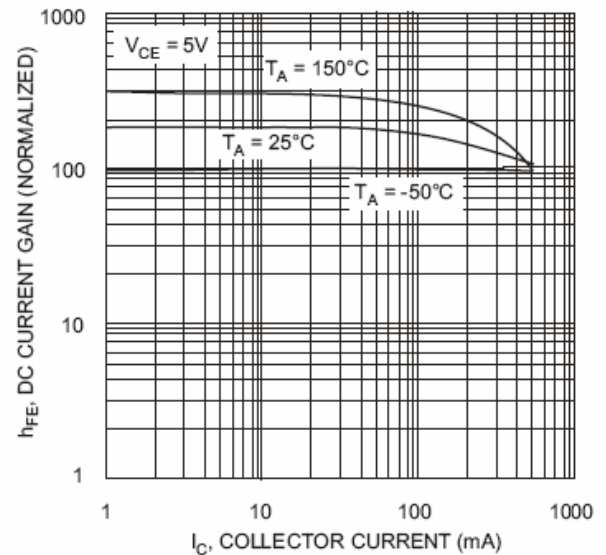


Fig. 4. DC Current Gain vs. Collector Current

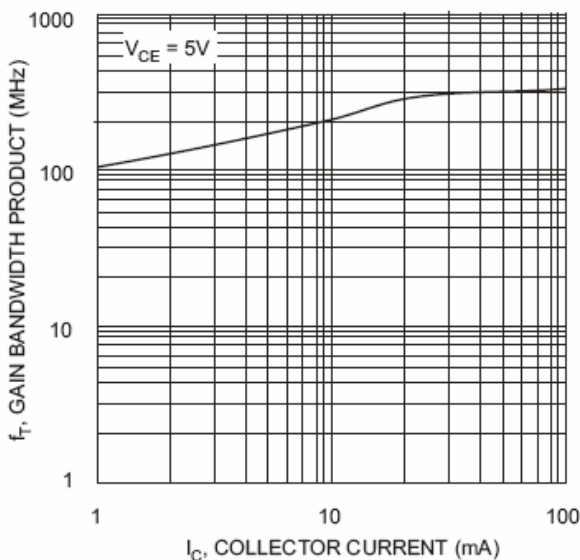


Fig. 5. Gain Bandwidth Product vs. Collector Current

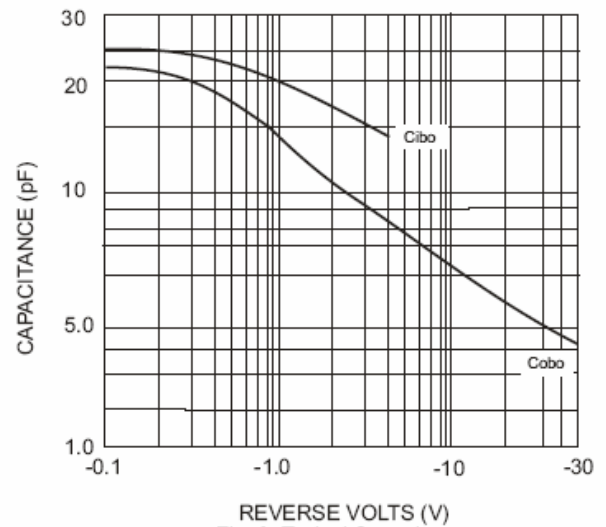


Fig. 6. Typical Capacitance

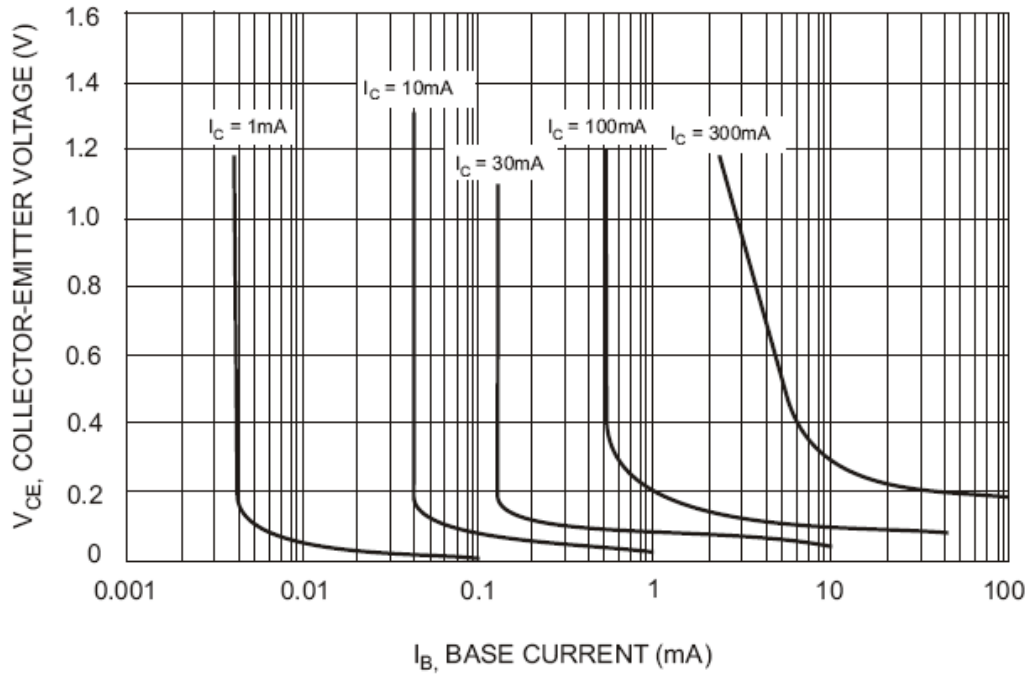


Fig. 7 Typical Collector Saturation Region

Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-363	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220