KTA1571S

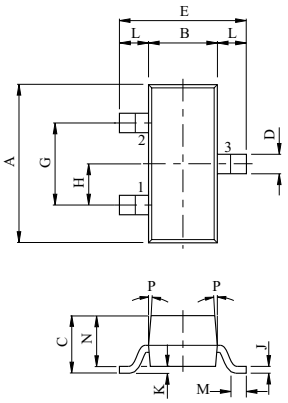
EPITAXIAL PLANAR PNP TRANSISTOR

FEATURE

· Low Collector-Emitter Saturation Voltage $V_{CE(sat)}$.

· High Collector Current Capability : I_C and I_{CP}.

· Higher Efficiency Leading to Less Heat Generation.



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.45+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7 °

1. EMITTER
2. BASE
3. COLLECTOR

SOT-23

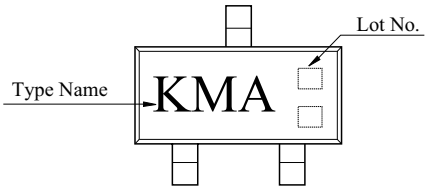
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-120	V
Collector-Emitter Voltage		V_{CEO}	-100	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-1	A
	Pulse *	I_{CP}	-3	
Base Current		I_B	-300	mA
Collector Power Dissipation**		P_C	350	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 ~ 150	℃

* Pulse Width = 300㎲, Duty Cycle ≤2%.

** Package Mounted on 99.5% Alumina 10 ×8 ×0.6mm.

MARKING

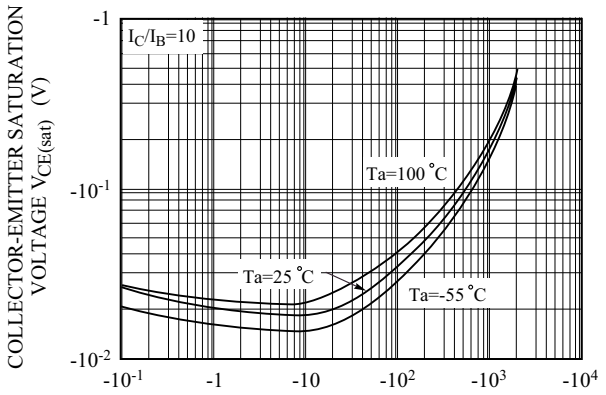


ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=-100㎂	-120	-	-	V
Collector-Emitter Breakdown Voltage **	$V_{(BR)CEO}$	I_C=-1mA	-100	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-100㎂	-5	-	-	V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-80V, I_E=0A	-	-	-100	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-4V, I_C=0A	-	-	-100	nA
Collector-Emitter Cut-Off Current	I_{CES}	V_{CES}=-80V, V_{BE}=0V	-	-	-100	nA
Collector-Emitter Saturation Voltage **	$V_{CE(sat)}$ (1)	I_C=-250mA, I_B=-25mA	-	-	-0.12	V
	$V_{CE(sat)}$ (2)	I_C=-500mA, I_B=-50mA	-	-	-0.18	
	$V_{CE(sat)}$ (3)	I_C=-1A, I_B=-100mA	-	-	-0.32	
Base-Emitter Saturation Voltage **	$V_{BE(sat)}$	I_C=-1A, I_B=-100mA	-	-	-1.1	V
Base-Emitter Voltag	V_{BE}	V_{CE}=-5V, I_C=-1A	-	-	-1.0	V
DC Current Gain **	h_{FE}(1)	V_{CE}=-5V, I_C=-1mA	150	-	-	
	h_{FE}(2)	V_{CE}=-5V, I_C=-250mA	150	-	-	
	h_{FE}(3)	V_{CE}=-5V, I_C=-500mA	150	-	450	
	h_{FE}(4)	V_{CE}=-5V, I_C=-1A	125	-	-	
Transition Frequency	f_T	V_{CE}=-10V, I_C=-50mA, f=100MHz	100	-	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, f=1MHz	-	17	-	pF

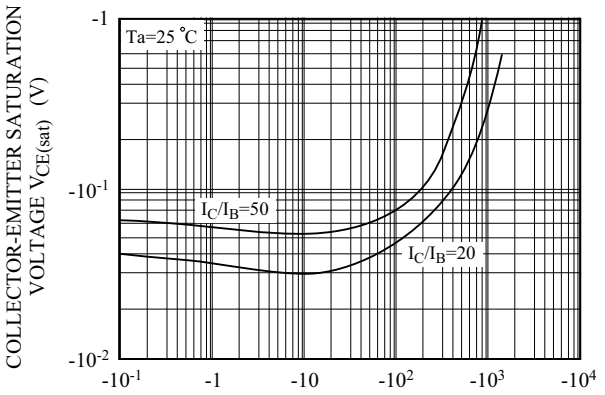
** Pulse Width = 300㎲, Duty Cycle ≤2%.

$V_{CE(sat)}$ - I_C



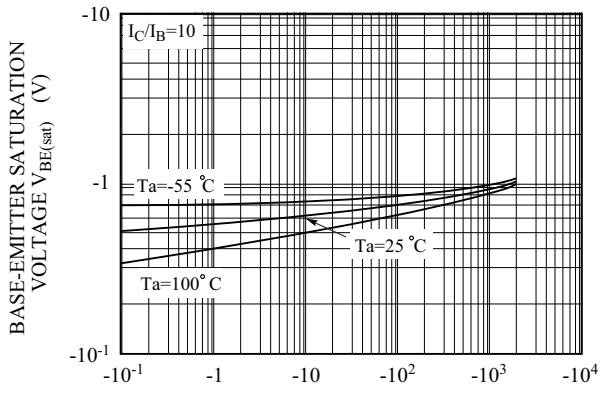
COLLECTOR CURRENT I_C (mA)

$V_{CE(sat)}$ - I_C



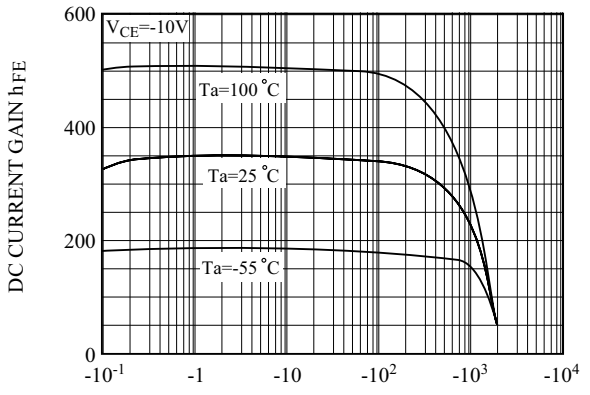
COLLECTOR CURRENT I_C (mA)

$V_{BE(sat)}$ - I_C



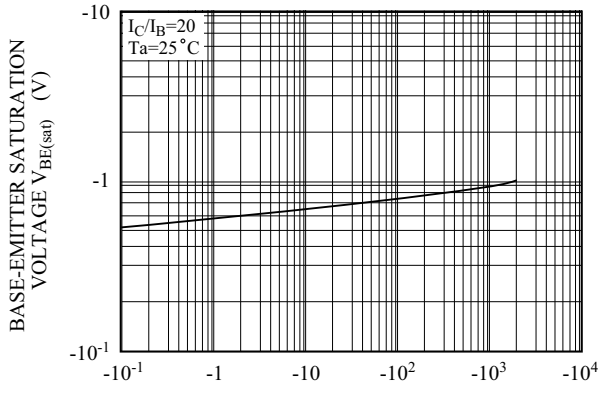
COLLECTOR CURRENT I_C (mA)

h_{FE} - I_C



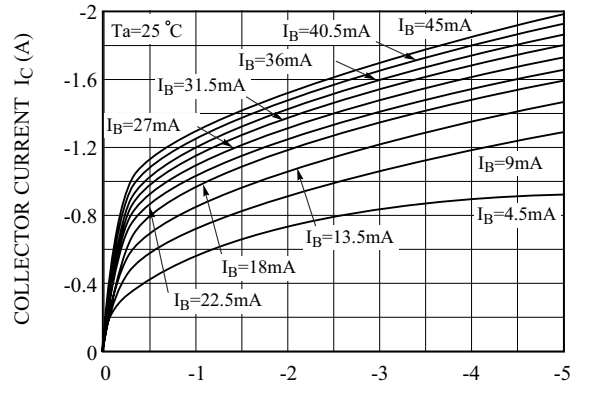
COLLECTOR CURRENT I_C (mA)

$V_{BE(sat)}$ - I_C



COLLECTOR CURRENT I_C (mA)

I_C - V_{CE}



COLLECTOR-EMITTER VOLTAGE V_{CE} (V)

SAFE OPERATING AREA