Elektronische Bauelemente

2SA719

-0.5 A, -30 V

PNP Plastic Encapsulated Transistor

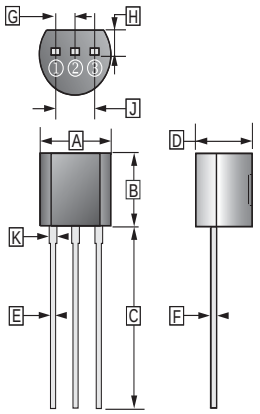
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

FEATURES

- For low-frequency power amplification and driver amplification.

TO-92

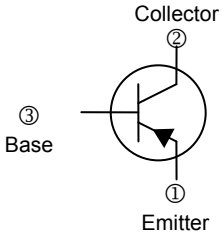


①Emitter
②Collector
③Base

REF.	Millimeter	
	Min.	Max.
A	4.40	4.70
B	4.30	4.70
C	12.70	-
D	3.30	3.81
E	0.36	0.56
F	0.36	0.51
G	1.27 TYP.	
H	1.10	-
J	2.42	2.66
K	0.36	0.76

CLASSIFICATION OF h_{FE}

Product-Rank	2SA719-Q	2SA719-R	2SA719-S
Range	85~170	120~240	170~340



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

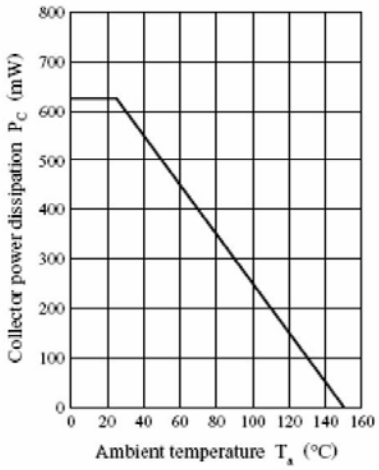
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-25	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-0.5	A
Collector Power Dissipation	P_C	625	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	°C

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

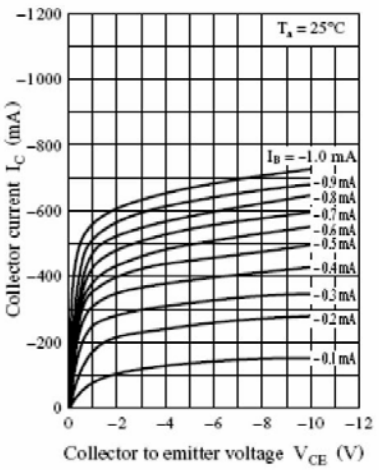
Parameter	Symbol	Min	Typ	Max	Unit	Test condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-30	-	-	V	I_C= -10μA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-25	-	-	V	I_C= -10mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	I_E= -10μA, I_C=0
Collector Cut-Off Current	I_{CBO}	-	-	-0.1	μA	V_{CB}= -20V, I_E=0
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	V_{EB}= -4V, I_C=0
DC Current Gain	$h_{FE(1)}$	85	-	340		V_{CE}= -10V, I_C= -0.15A
	$h_{FE(2)}$	40	-	-		V_{CE}= -10V, I_C= -0.5A
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.6	V	I_C= -0.3A, I_B= -30mA
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1.5	V	I_C= -0.3A, I_B= -30mA
Transition Frequency	f_T	-	200	-	MHz	V_{CE}= -10V, I_C= -50mA, f=200MHz
Collector Output Capacitance	C_{ob}	-	-	15	pF	V_{CB}= -10V, I_E= 0, f=1MHz

CHARACTERISTIC CURVE

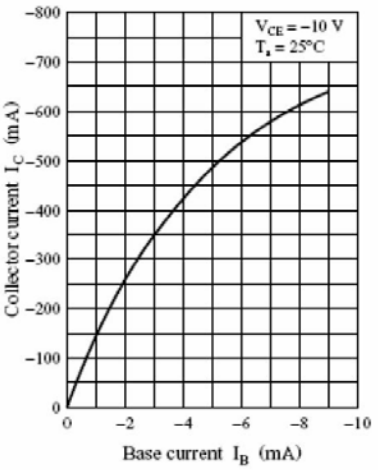
P_C — T_a



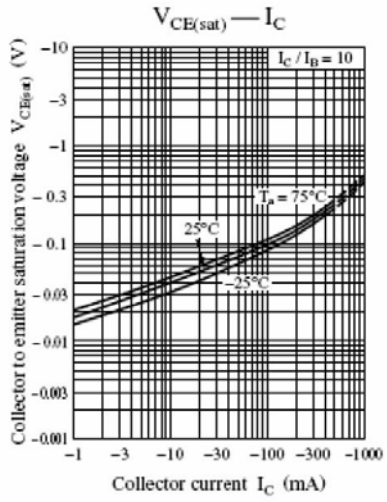
I_C — V_{CE}



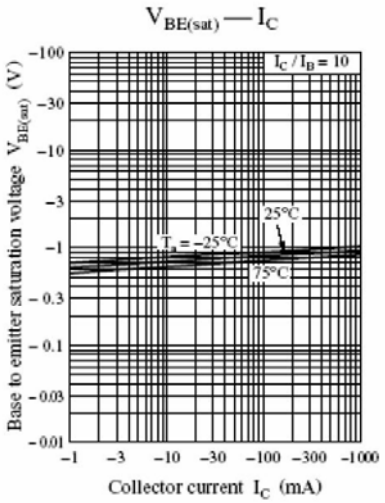
I_C — I_B



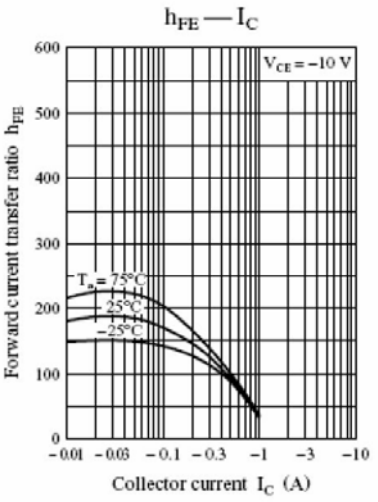
$V_{CE(sat)}$ — I_C



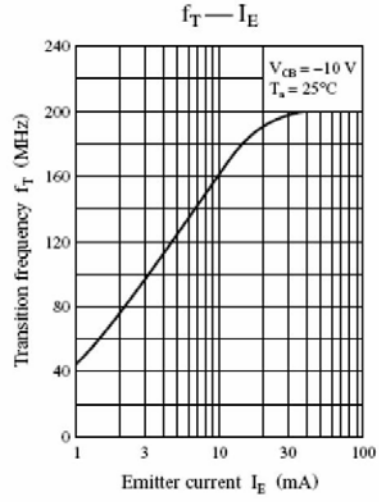
$V_{BE(sat)}$ — I_C



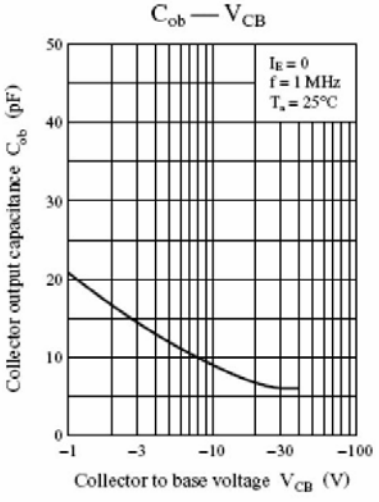
h_{FE} — I_C



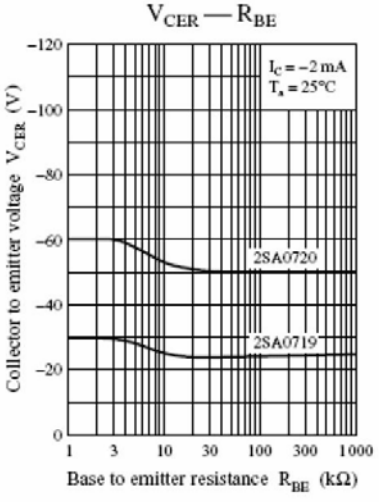
f_T — I_E



C_{ob} — V_{CB}



V_{CER} — R_{BE}



CHARACTERISTIC CURVE