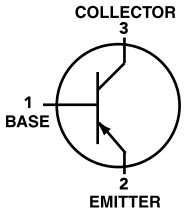
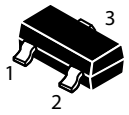
WEITRON

2SA1036K

PNP General Purpose Transistors

Lead(Pb)-Free





SOT-23

MAXIMUM RATINGS(Ta=25°C)

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	-32	V
Collector-Base Voltage	V_{CBO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-500*	mA
Total Device Dissipation T_A=25°C	P_D	0.2	mW
Junction Temperature	T_j	+150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

*P_D MAX. Must not be exceeded.

Device Marking

2SA1036KP=HP , 2SA1036KQ=HQ , 2SA1036KR=HR

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage I_C = -1mA, I_E = 0A	$V_{(BR)CEO}$	-32	-	-	V
Collector-Base Breakdown Voltage I_C = -100μA, I_B = 0A	$V_{(BR)CBO}$	-40	-	-	V
Emitter-Base Breakdown Voltage I_E= 100μA, I_C=0	$V_{(BR)EBO}$	-5.0	-	-	V
Collector Cutoff Current V_{CB} = -20V, I_C = 0A	I_{CBO}	-	-	1.0	μA
Emitter Cutoff Current V_{EB} = -4V, I_C = 0A	I_{EBO}	-	-	1.0	μA

ON CHARACTERISTICS

Collector-Emitter Saturation Voltage I_C = -100mA, I_B = -10mA	$V_{CE(sat)}$	-	-	-0.4	V
DC Current Transfer Ration V_{CE} = -3V, I_C = -10mA	h_{FE}	82	-	390	V

SMALL-SIGNAL CHARACTERISTICS

Transition frequence V_{CE}=-5V, I_E=20mA, f=100MHz	f_T	-	200	-	MHz
Output Capacitance V_{CB} = -10V, I_E = 0A, f = 1.0MHz	Cob	-	7	-	pF

CLASSIFICATION h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390

Electrical characteristic curves

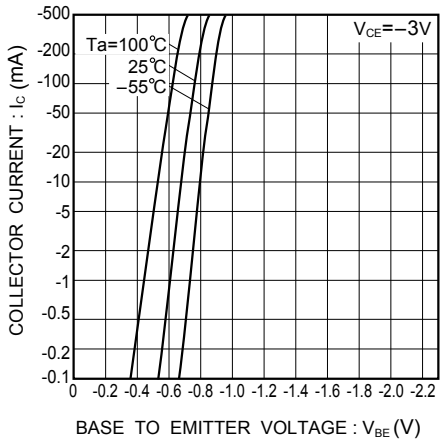


Fig.1 Grounded emitter propogation

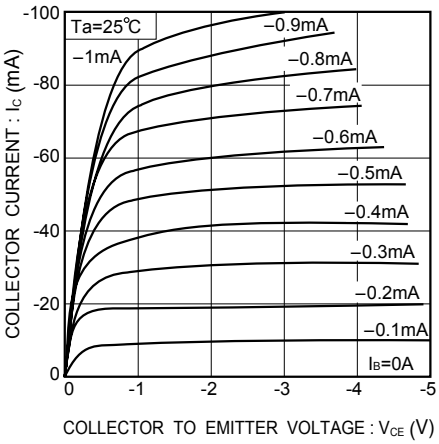


Fig.2 Grounded emitter output characteristics (I)

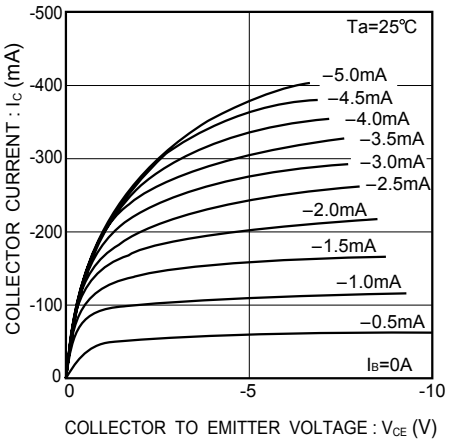


Fig.3 Ground emitter output characteristics (II)

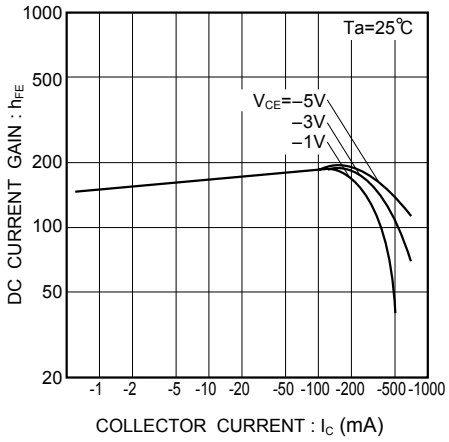


Fig.4 DC current gain vs collector current (I)

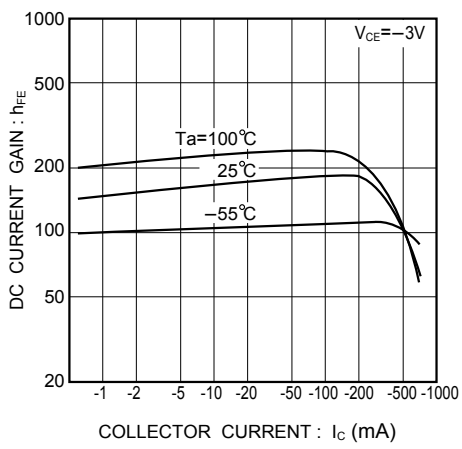


Fig.5 DC current gain vs. collector current (II)

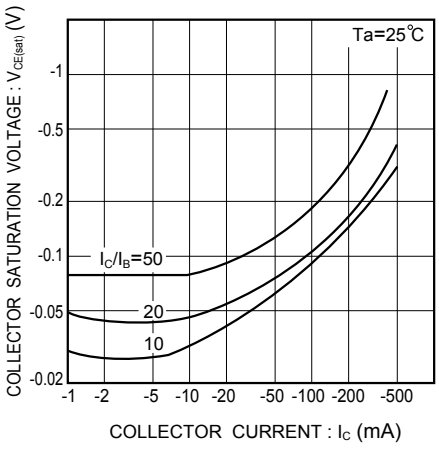


Fig.6 Collector emitter saturation voltage vs. collector current (I)

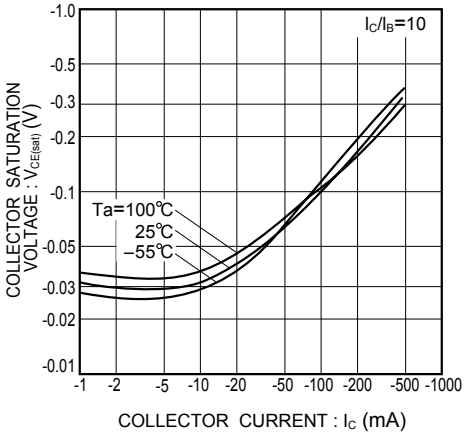


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

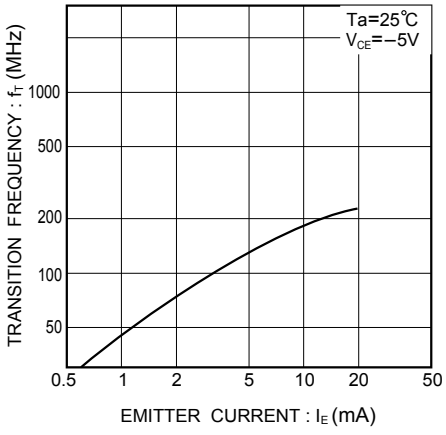


Fig.8 Gain bandwidth product vs. emitter current

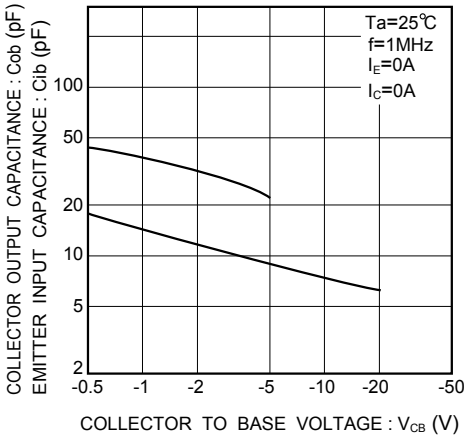
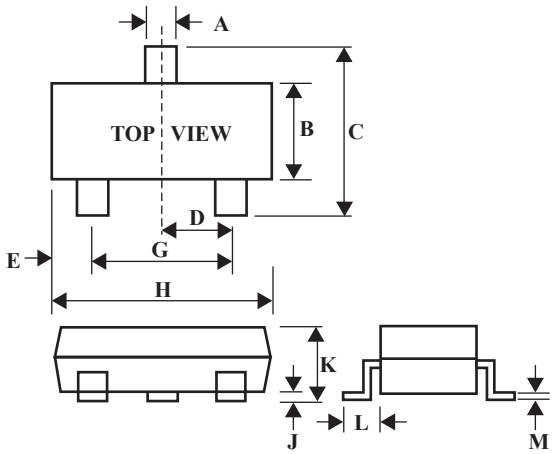


Fig.9 Collectur output capacitance vs. collector-base voltage. Emitter input capacitance vs. emitter -base voltage

SOT-23 Outline Dimension



SOT-23		
Dim	**Min**	**Max**
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25