SeCoS
Elektronische Bauelemente

2SB766A
PNP
Plastic Encapsulated Transistor
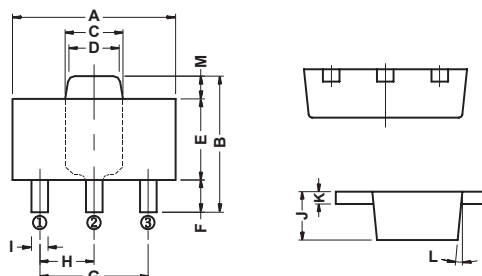
FEATURES

· Large collector power dissipation P_C
· Complementary to 2SD874A

SOT-89

PACKAGE INFORMATION

Weight = 0.05 g (approximately)

Collector
②

①
Base

③
Emitter
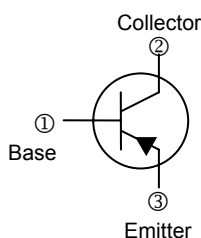
REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter Max.
A	4.40	4.60	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

MARKING

B☐ ← ☐ = hFE ranking

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-1	A
Collector Power Dissipation	P_C	0.5	W
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	°C

PNP ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	-60	-	-	V	I_C=-10µA, I_E=0
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-50	-	-	V	I_C= -2mA, I_B=0
Emitter-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}=-4 V, I_C=0
DC current gain	$h_{FE(1)}$	85	-	340		V_{CE}=-10V, I_C= -500mA
	$h_{FE(2)}$	50	-	-		V_{CE}=-5V, I_C= -1000mA
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-0.2	-0.4	V	I_C=-500mA, I_B= -50mA
Base-emitter saturation voltage	$V_{BE(sat)}$	-	-0.85	-1.2	V	I_C=-500mA, I_B= -50mA
Transition frequency	f_T	-	200	-	MHz	V_{CE}=-10V, I_C=-50mA, f=200MHz
Output Capacitance	C_{OB}	-	20	30	pF	V_{CB}=-10V, I_E=0, f=1MHz

CLASSIFICATION OF hFE2

Rank	Q	R	S
Range	82 - 170	120 - 240	170 - 340
Marking	B**Q**	B**R**	B**S**

CHARACTERISTIC CURVES

P_C — Ta

I_C — V_{CE}

$V_{CE(sat)}$ — I_C

$V_{BE(sat)}$ — I_C

h_{FE} — I_C

f_T — I_E

C_{ob} — V_{CB}

Area of safe operation (ASO)