

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Complementary to BCP3904
- Low Current
- Low Voltage

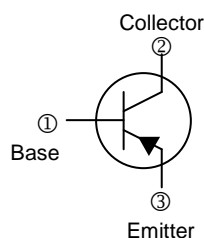
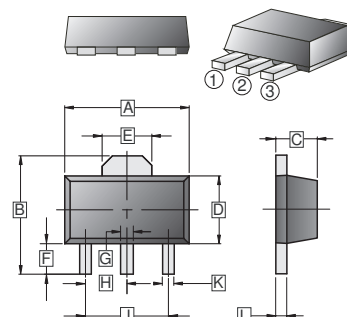
MARKING

2A

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7' inch

SOT-89



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50	TYP
C	1.40	1.60	J	3.00	TYP
D	2.30	2.60	K	0.32	0.52
E	1.50	1.70	L	0.35	0.44
F	0.89	1.2			

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-40	V
Emitter-Base Voltage	V _{EBO}	-6	V
Collector Current -Continuous	I _C	-0.2	A
Collector Power Dissipation	P _C	0.5	W
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 Conditions
Collector-base breakdown voltage	V _{(BR)CBO}	-40	-	-	V	I _C = -10μA, I _E =0
Collector-emitter breakdown	V _{(BR)CEO}	-40	-	-	V	I _C = -1mA, I _B =0
Emitter-base breakdown voltage	V _{(BR)EBO}	-6	-	-	V	I _E = -10μA, I _C =0
Collector cut-off current	I _{CBO}	-	-	-0.05	μA	V _{CB} = -30V, I _E =0
Emitter cut-off current	I _{EBO}	-	-	-0.05	μA	V _{EB} = -6V, I _C =0
Collector ut-off current	I _{CEx}	-	-	-0.05	μA	V _{CB} = -30V, V _{BE(off)} = -3V
DC current gain	h _{FE(1)}	60	-	-	-	V _{CE} = -1V, I _C = -0.1mA
	h _{FE(2)}	80	-	-	-	V _{CE} = -1V, I _C = -1mA
	h _{FE(3)}	100	-	300	-	V _{CE} = -1V, I _C = -10mA
	h _{FE(4)}	60	-	-	-	V _{CE} = -1V, I _C = -50mA
	h _{FE(5)}	30	-	-	-	V _{CE} = -1V, I _C = -100mA
Collector-emitter saturation voltage	V _{CE(sat)1}	-	-	-0.25	V	I _C = -10mA, I _B = -1mA
	V _{CE(sat)2}	-	-	-0.4	V	I _C = -50mA, I _B = -5mA
Base-emitter saturation voltage	V _{BE(sat)1}	-0.65	-	-0.85	V	I _C = -10mA, I _B = -1mA
	V _{BE(sat)2}	-	-	-0.95	V	I _C = -50mA, I _B = -5mA
Transition frequency	f _T	250	-	-	MHz	V _{CE} = -20V, I _C = -10mA, f=100MHz
Collector Capacitance	C _C	-	4.5	-	pF	V _{CB} = -5V, I _E =0, f=1MHz
Emitter Capacitance	C _E	-	10	-	pF	V _{EB} = -0.5V, I _C =0, f=1MHz
Noise Figure	NF	-	4	-	dB	V _{CE} = -5V, I _C = -0.1mA, f=10Hz~15.7kHz, R _S =1KΩ
Delay Time	T _D	-	35	-	nS	I _C = -10mA, I _{B1} = -I _{B2} = -1mA
Rise Time	T _R	-	35	-		
Storage Time	T _S	-	225	-		
Fall Time	T _F	-	75	-		