

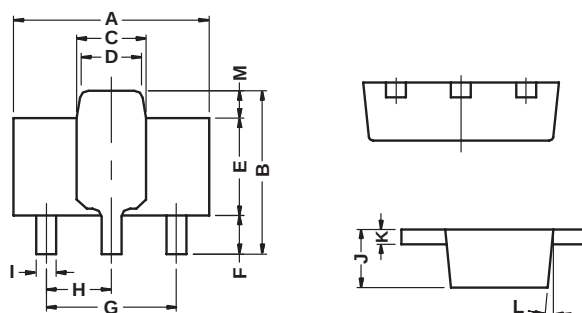
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

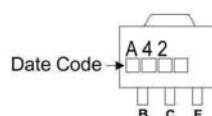
The BCPA42 is designed for application as a video output to drive color CRT, or as a dialer circuit in electronics telephone.

PACKAGE DIMENSIONS

SOT-89



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	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.	

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Collector Current -Continuous	I_C	500	mA
Collector Power Dissipation	P_D	1.0	W
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS at Ta = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	300	-	-	V	$I_C = 100 \mu A, I_E = 0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	300	-	-	V	$I_C = 1 \text{ mA}, I_B = 0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	6.0	-	-	V	$I_E = 100 \mu A, I_C = 0$
Collector cut-off current	I_{CBO}	-	-	0.1	μA	$V_{CB} = 260 \text{ V}$
Emitter cut-off current	I_{EBO}	-	-	0.1	μA	$V_{EB} = 6 \text{ V}$
DC current gain	$h_{FE(1)}$	25	-	-		$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}$
	$h_{FE(2)}$	40	-	-		$V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}$
	$h_{FE(3)}$	40	-	-		$V_{CE} = 10 \text{ V}, I_C = 30 \text{ mA}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	500	mV	$I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$
Base-emitter saturation voltage	$V_{BE(sat)}$	-	-	900	mV	$I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$
Transition frequency	f_T	50	-	-	MHz	$V_{CE} = 20 \text{ V}, I_C = 10 \text{ mA}, f = 100 \text{ MHz}$
Output Capacitance	C_{OB}	-	3	-	pF	$V_{CB} = 20 \text{ V}$

CHARACTERISTIC CURVES

