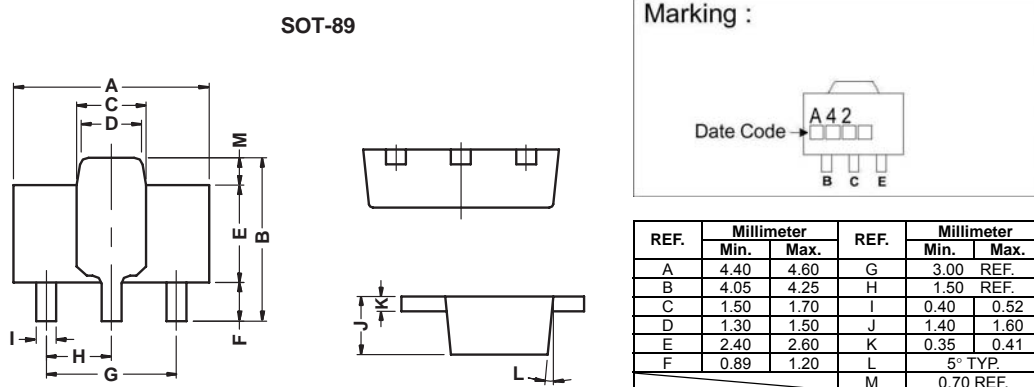


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## 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



## ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	$V_{CB0}$	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	$\mu A$	$V_{CB}=260\text{ V}$
Emitter cut-off current	$I_{EBO}$	-	-	0.1	$\mu A$	$V_{EB}=6\text{ V}$
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**

