

BF470 BF472

SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

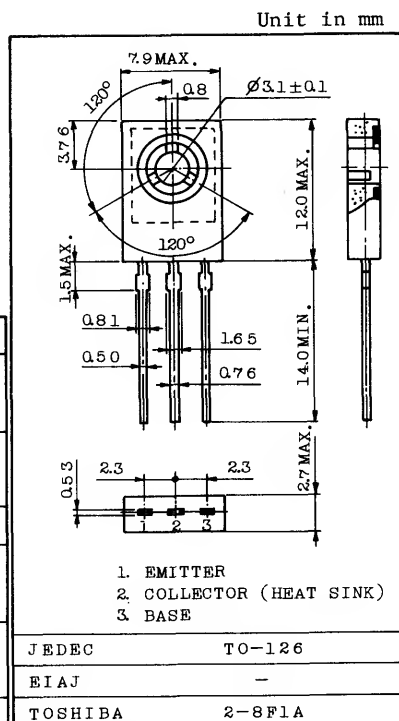
HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATIONS.
COLOR TV CHROMA OUTPUT APPLICATIONS.

FEATURES:

- NPN Complements are BF469, and BF471

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	BF470	-250	V
	BF472	-300	
Collector-Emitter Voltage	BF470	-250	V
	BF472	-300	
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	DC	I_C	mA
	Peak	I_{CP}	
Total Power Dissipation	$T_a=25^{\circ}\text{C}$	1.2	W
	$T_c=25^{\circ}\text{C}$	5	
Base Current	I_B	-20	mA
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-65 ~ 150	$^{\circ}\text{C}$
Solder Temperature, 1.5mm from Case for 10 Seconds	-	350	$^{\circ}\text{C}$



Weight : 0.72g

THERMAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Thermal Resistance (Junction to Ambient)	$R_{\theta JA}$	104	$^{\circ}\text{C/W}$
Thermal Resistance (Junction to Case)	$R_{\theta JC}$	12.5	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	BF470	I _{CBO}	V _{CB} =-200V, I _E =0	-	-	-0.1	μA
	BF472	I _{CER}	V _{CE} =-250V, R _{BE} =2.7kΩ	-	-	-0.05	
Emitter Cut-off Current		I _{EBO}	V _{EB} =-5V, I _C =0	-	-	-10	μA
Collector-Emitter Breakdown Voltage	BF470	V(BR) _{CEO}	I _C =-1mA, I _B =0	-250	-	-	V
	BF472	V(BR) _{CER}	I _C =-1μA, R _{BE} =2.7kΩ	-300	-	-	
High Temperature Collector Cut-off Current		I _{CER}	V _{CE} =-200V, R _{BE} =2.7kΩ T _j =150°C	-	-	-10	μA
DC Current Gain		h _{FE}	V _{CE} =-20V, I _C =-25mA	50	-	-	
Collector-Emitter RF Saturation Voltage		V _{CE(sat)} _{RF}	I _C =-25mA, T _j =150°C	-	-20	-	V
Base-Emitter Voltage		V _{BE}	V _{CE} =-20V, I _C =-25mA	-	-0.75	-	V
Transition Frequency		f _T	V _{CE} =-10V, I _C =-10mA	60	80	-	MHz
Reverse Transfer Capacitance		C _{re}	V _{CB} =-30V, I _E =0, f=1MHz	-	-	1.8	pF

