

# BF469 BF471

SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

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

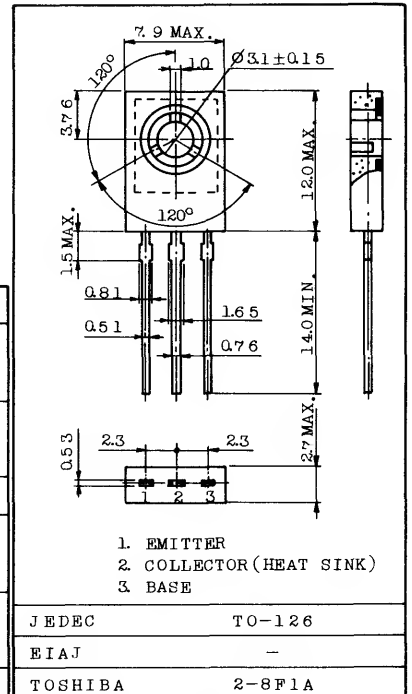
**FEATURES:**

. PNP Complements are BF470, and BF472

**MAXIMUM RATINGS (Ta=25°C)**

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	BF469	V <sub>CB0</sub>	250	V
	BF471		300	
Collector-Emitter Voltage	BF469	V <sub>CEO</sub>	250	V
	BF471		300	
Emitter-Base Voltage		V <sub>EB0</sub>	5	V
Collector Current	DC	I <sub>C</sub>	50	mA
	Peak	I <sub>CP</sub>	100	
Total Power Dissipation	Ta=25°C	P <sub>tot</sub>	1.2	W
	Tc=25°C		5.0	
Base Current		I <sub>B</sub>	20	mA
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-65 ~ 150	°C
Solder Temperature, 1.5mm from Case for 10 Seconds.		-	350	°C

Unit in mm



Weight : 0.72g

**THERMAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Thermal Resistance (Junction to Ambient)	R <sub>θJA</sub>	104	°C/W
Thermal Resistance (Junction to Case)	R <sub>θJC</sub>	25	°C/W

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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	BF469	$I_{CBO}$	$V_{CB}=200V, I_E=0$	-	-	0.1	$\mu A$
	BF471	$I_{CER}$	$V_{CE}=250V, R_{BE}=2.7k\Omega$	-	-	0.05	
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	10	$\mu A$
Collector-Emitter Breakdown Voltage	BF469	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	250	-	-	V
	BF471	$V_{(BR)CER}$	$I_C=1\mu A, R_{BE}=2.7k\Omega$	300	-	-	
High Temperature Collector Cut-off Current		$I_{CER}$	$V_{CE}=200V, R_{BE}=2.7k\Omega$ $T_j=150^\circ C$	-	-	10	$\mu A$
DC Current Gain		$h_{FE}$	$V_{CE}=20V, I_C=25mA$	50	-	-	
Collector-Emitter RF Saturation Voltage		$V_{CE(sat)}$ RF	$I_C=25mA, T_j=150^\circ C$	-	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	100	-	MHz
Reverse Transfer Capacitance		$C_{re}$	$V_{CB}=30V, I_E=0, f=1MHz$	-	-	1.8	pF

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