

SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

# 2SC1569

Unit in mm

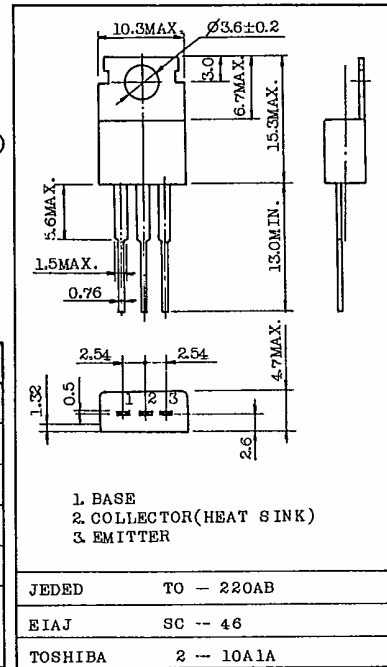
COLOR TV CHROMA OUTPUT APPLICATIONS.

**FEATURES:**

- High Voltage :  $V_{CEO}=300V$
- Small Collector Output Capacitance :  $C_{ob}=5.0pF(Typ.)$
- High Transition Frequency :  $f_T=100MHz (Typ.)$

**MAXIMUM RATINGS (Ta=25°C)**

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	300	V
Collector-Emitter Voltage		$V_{CEO}$	300	V
Emitter-Base Voltage		$V_{EBO}$	5	V
Collector Current		$I_C$	150	mA
Emitter Current		$I_E$	-150	mA
Collector Power Dissipation	Ta=25°C	$P_C$	1.5	W
	Tc=25°C		12.5	
Junction Temperature		$T_j$	150	°C
Storage Temperature Range		$T_{stg}$	-55~150	°C



Mounting kit No. AC75  
Weight : 1.9g

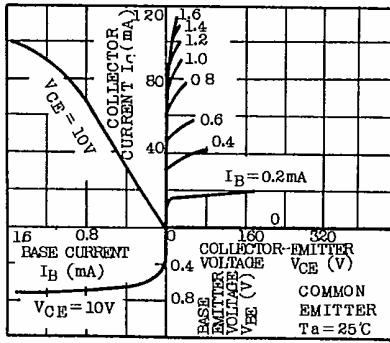
**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=100V, I_E=0$	-	-	1.0	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	1.0	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=5mA, I_B=0$	300	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=10V, I_C=50mA$	40	-	170	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=20mA$	-	-	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=20mA$	-	-	1.2	V
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=30mA$	40	100	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=50V, I_E=0, f=1MHz$	-	5.0	6.5	pF

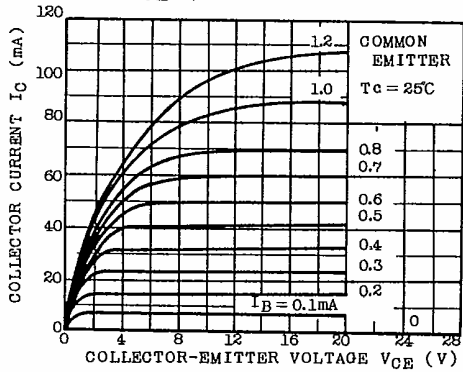
..... TOSHIBA CORPORATION

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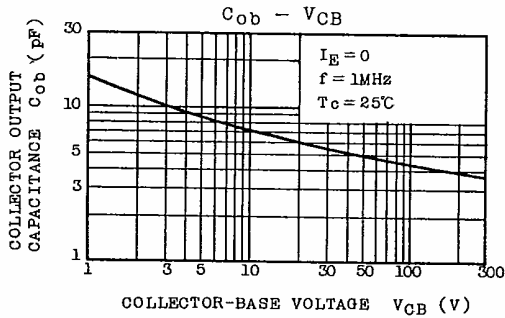
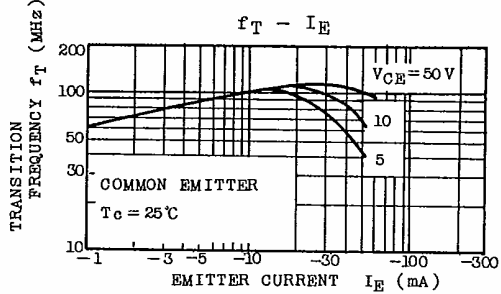
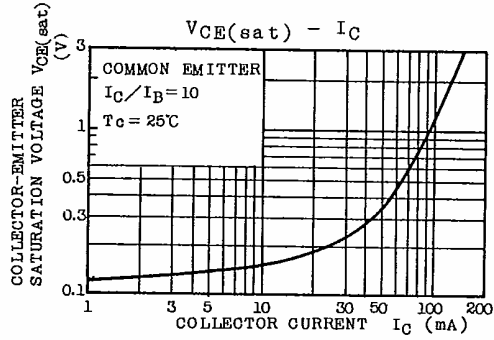
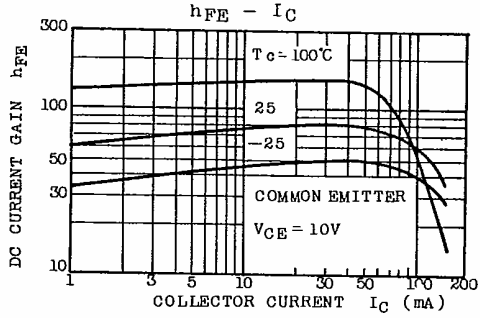
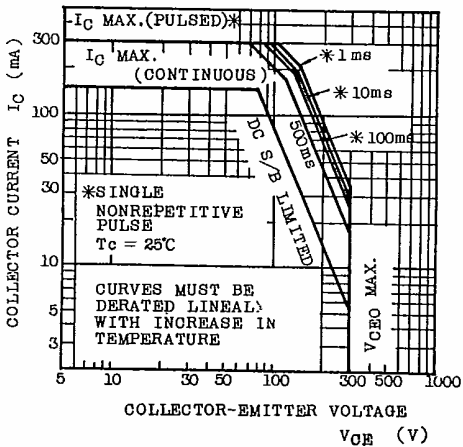
## STATIC CHARACTERISTICS



## $I_C - V_{CE}$ (LOW VOLTAGE REGION)



## SAFE OPERATING AREA



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