SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

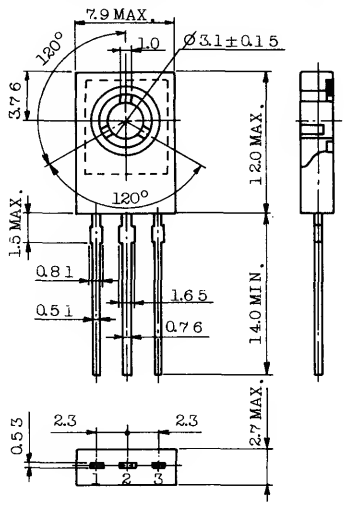
2SA1322

HIGH VOLTAGE SWITCHING APPLICATIONS.
COLOR TV CHROMA OUTPUT APPLICATIONS.

FEATURES:

. High Voltage : V_{CEO}=-250V
. Low C_{re} : 2.2pF(Max.)
. Complementary to 2SC3335

Unit in mm



1. EMITTER
2. COLLECTOR (HEAT SINK)
3. BASE

JEDEC	TO-126
EIAJ	–
TOSHIBA	2-8F1A

Weight : 0.72g
Mounting Kit No. AC46C

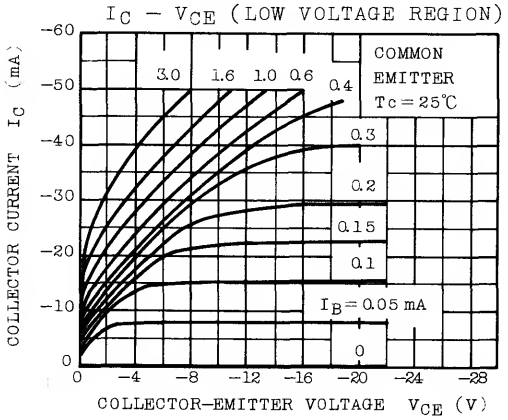
MAXIMUM RATINGS ($Ta=25^{o}C$)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-250	V
Collector-Emitter Voltage		V_{CEO}	-250	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-50	mA
	Peak	I_{CP}	-100	
Base Current		I_B	-20	mA
Collector Power Dissipation	Ta=25°C	P_C	1.2	W
	Tc=25°C		5.0	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

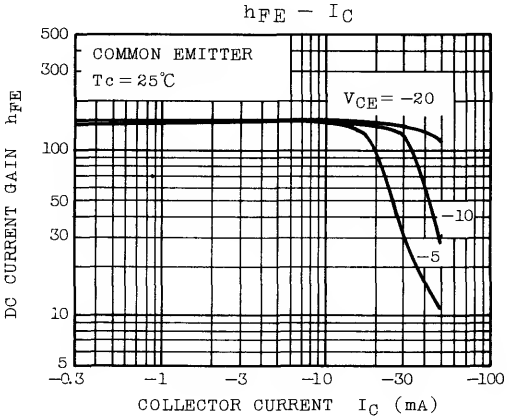
ELECTRICAL CHARACTERISTICS ($Ta=25^{o}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-200V, I_E=0	–	–	-1.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	–	–	-1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-250	–	–	V
DC Current Gain	h_{FE}	V_{CE}=-20V, I_C=-25mA	50	–	–	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-10mA, I_B=-1mA	–	–	-1.5	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	–	–	2.2	pF

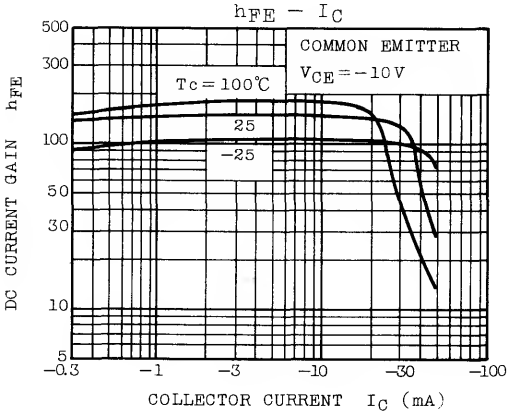
I_C – V_{CE} (LOW VOLTAGE REGION)



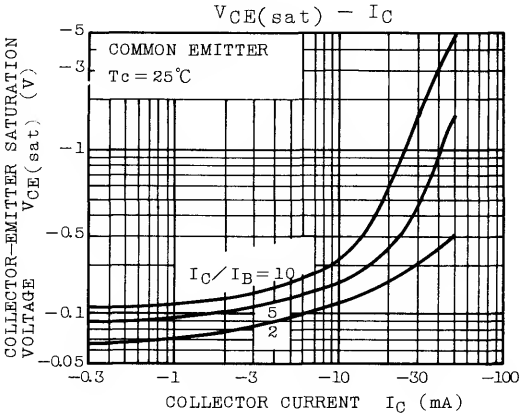
h_{FE} – I_C



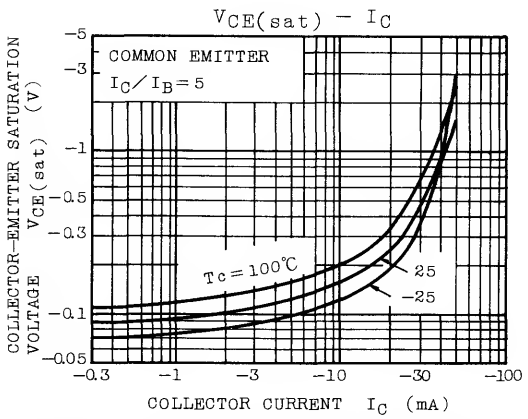
h_{FE} – I_C



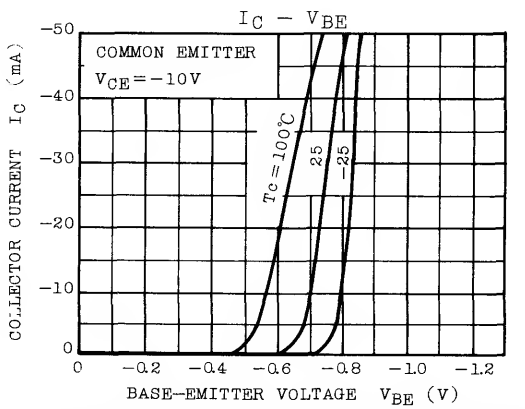
$V_{CE(sat)}$ – I_C

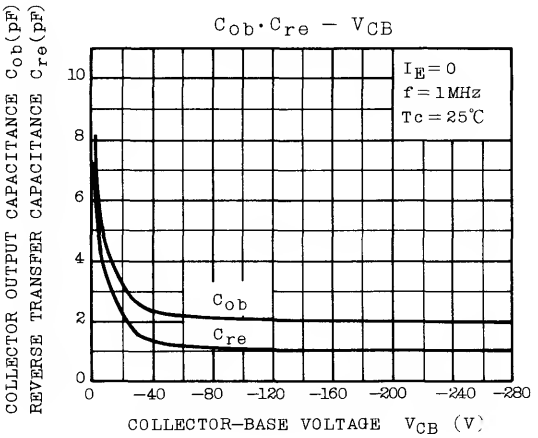


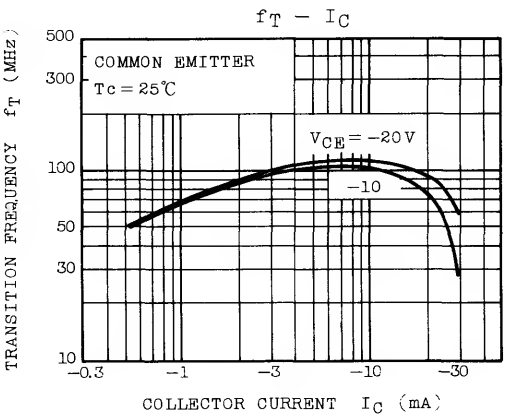
$V_{CE(sat)}$ – I_C

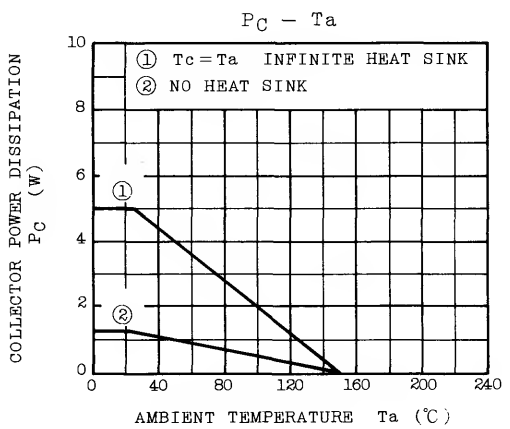


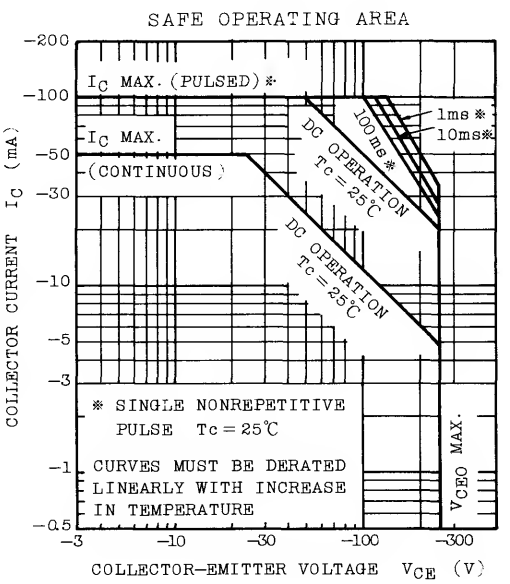
I_C – V_{BE}




C_{ob}·C_{re} – V_{CB}
I_E = 0
f = 1MHz
Tc = 25℃
C_{ob}
C_{re}
COLLECTOR OUTPUT CAPACITANCE C_{ob}(pF)
REVERSE TRANSFER CAPACITANCE C_{re}(pF)
COLLECTOR–BASE VOLTAGE V_{CB} (V)


f_T – I_C
COMMON EMITTER
Tc = 25℃
V_{CE} = –20V
–10
TRANSITION FREQUENCY f_T (MHz)
COLLECTOR CURRENT I_C (mA)


P_C – Ta
① Tc = Ta INFINITE HEAT SINK
② NO HEAT SINK
COLLECTOR POWER DISSIPATION P_C (W)
AMBIENT TEMPERATURE Ta (℃)


SAFE OPERATING AREA
I_C MAX. (PULSED)*
I_C MAX. (CONTINUOUS)
DC OPERATION Tc = 25℃
100ms*
1ms*
10ms*
* SINGLE NONREPETITIVE PULSE Tc = 25℃
CURVES MUST BE DERATED LINEARLY WITH INCREASE IN TEMPERATURE
V_{CEO} MAX.
COLLECTOR CURRENT I_C (mA)
COLLECTOR–EMITTER VOLTAGE V_{CE} (V)