SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

S1236

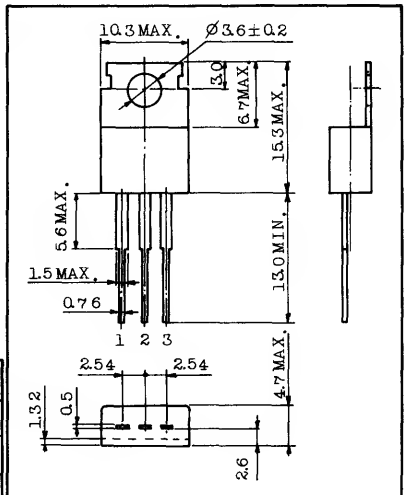
POWER AMPLIFIER APPLICATIONS.
TV VERTICAL OUTPUT APPLICATIONS.

FEATURES:

. Good Linearity of h_{FE}

. Complementary to S1237

Unit in mm



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

JEDEC	TO-220AB
EIAJ	SC-46
TOSHIBA	2-10A1A

Mounting Kit No. AC75

Weight : 1.9g

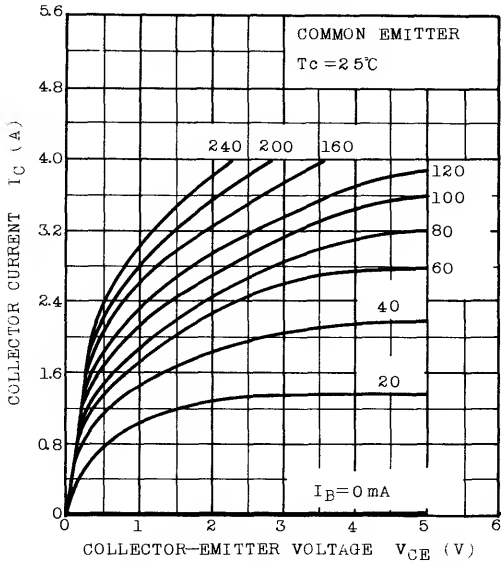
MAXIMUM RATINGS ($Ta=25^{\circ}C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	90	V
Collector-Emitter Voltage	V_{CEO}	90	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	4	A
Emitter Current	I_E	-4	A
Base Current	I_B	3	A
Collector Power Dissipation ($Tc=25^{\circ}C$)	P_C	40	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55~150	$^{\circ}C$

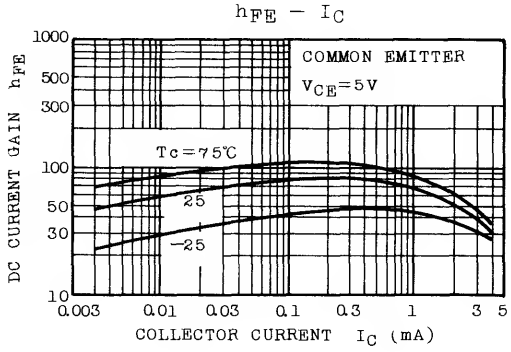
ELECTRICAL CHARACTERISTICS ($Ta=25^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=90V$, $I_E=0$	-	-	20	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V$, $I_C=0$	-	-	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA$, $I_B=0$	90	-	-	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5V$, $I_C=0.5A$	40	-	200	
	$h_{FE(2)}$	$V_{CE}=5V$, $I_C=3A$	15	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A$, $I_B=0.3A$	-	-	1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V$, $I_C=3A$	-	-	1.5	V
Transition Frequency	f_T	$V_{CE}=5V$, $I_C=0.5A$	3	8	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, f=1MHz	-	85	-	pF

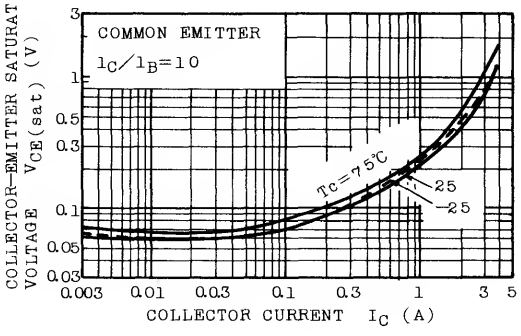
$I_C - V_{CE}$



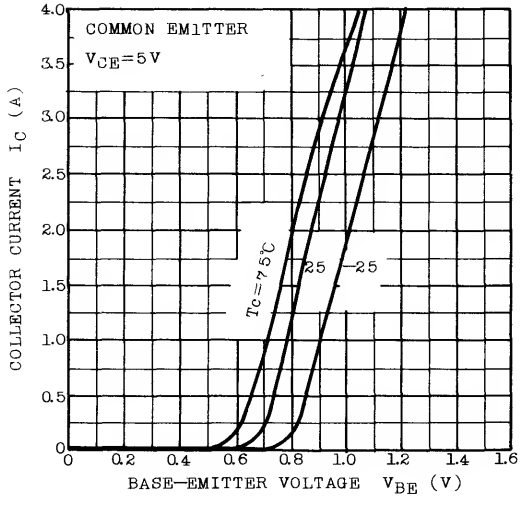
$h_{FE} - I_C$



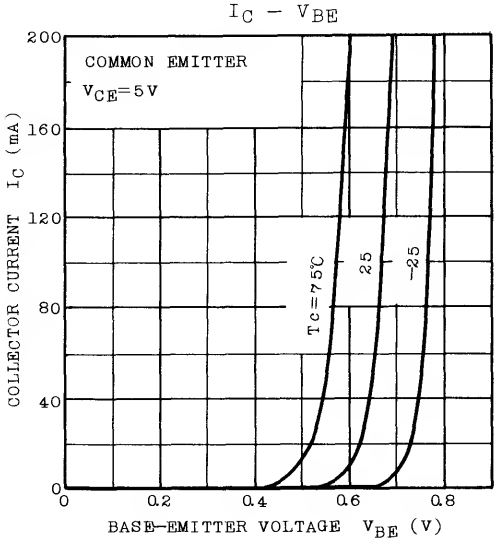
$V_{CE(sat)} - I_C$



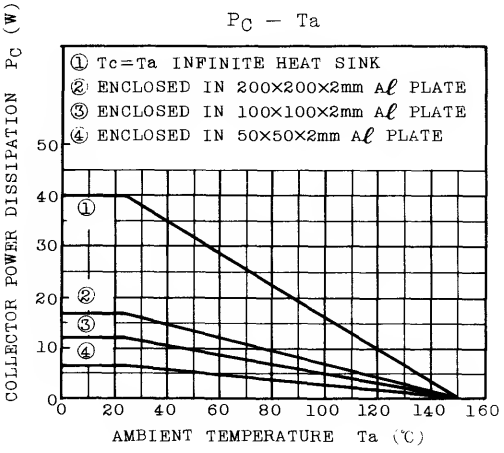
$I_C - V_{BE}$



$I_C - V_{BE}$



P_C — Ta



SAFE OPERATING AREA