SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1243

POWER AMPLIFIER APPLICATIONS.

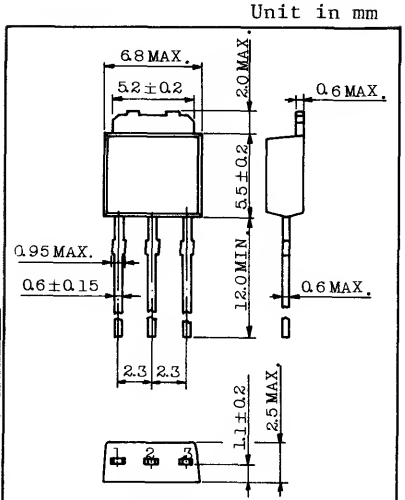
CAR RADIO AND CAR STEREO OUTPUT STAGE APPLICATIONS.

FEATURES:

. Good Linearity of h_{FE}

. Complementary to 2SC3073

Unit in mm



1. BASE
2. COLLECTOR (FIN)
3. EMITTER

JEDEC	—
EIAJ	—
TOSHIBA	2-7B1A

Weight : 0.36g

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

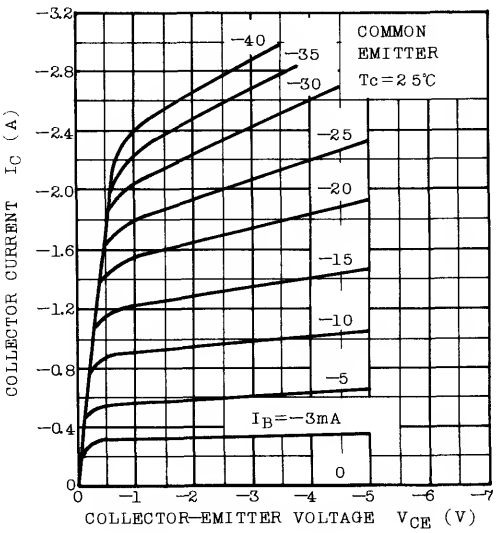
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-30	V
Collector-Emitter Voltage		V_{CEO}	-30	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-3	A
Base Current		I_B	-0.6	A
Collector Power Dissipation	$Ta=25^{o}C$	P_C	1.0	W
	$Tc=25^{o}C$		10	
Junction Temperature		T_j	150	^{o}C
Storage Temperature Range		T_{stg}	-55 ~ 150	^{o}C

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

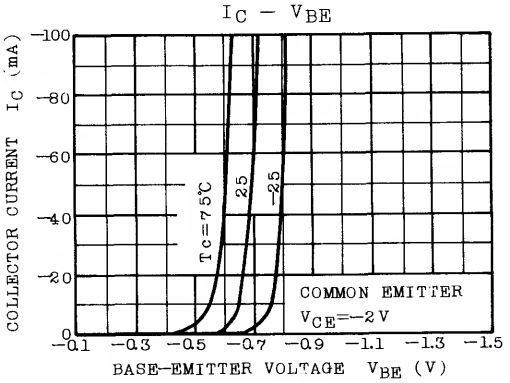
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-20V, I_E=0	-	-	-1.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-1mA, I_C=0	-5	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE}=-2V, I_C=-0.5A	70	-	240	
	$h_{FE(2)}$	V_{CE}=-2V, I_C=-2.5A	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-2A, I_B=-0.2A	-	-0.3	-0.8	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-2V, I_C=-0.5A	-	-0.75	-1.0	V
Transition Frequency	f_T	V_{CE}=-2V, I_C=-0.5A	-	100	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	40	-	pF

Note: $h_{FE(1)}$ Classification O : 70~140, Y : 120~240

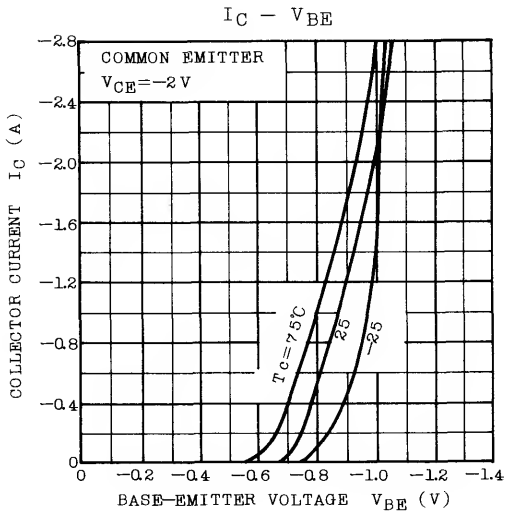
$I_C - V_{CE}$



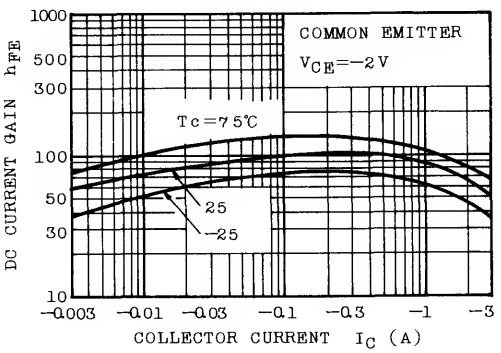
$I_C - V_{BE}$



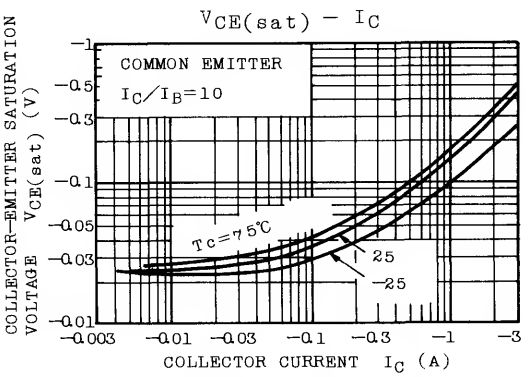
$I_C - V_{BE}$



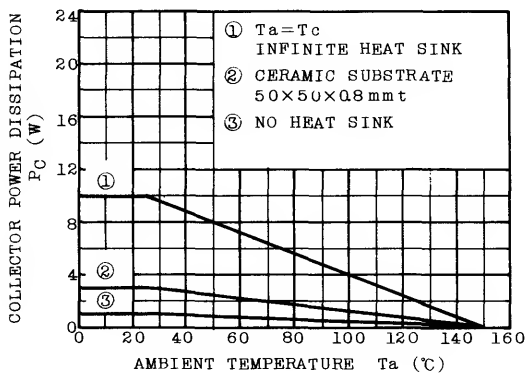
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



P_C – Ta



SAFE OPERATING AREA