2SA473

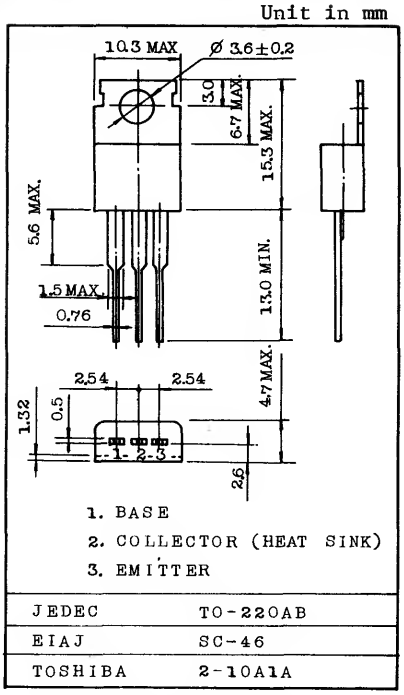
POWER AMPLIFIER APPLICATIONS.
CAR RADIO AND CAR STEREO OUTPUT STAGE APPLICATIONS

FEATURES:

. Good Linearity of h_{FE}.

. Complementary to 2SC1173.

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°C)

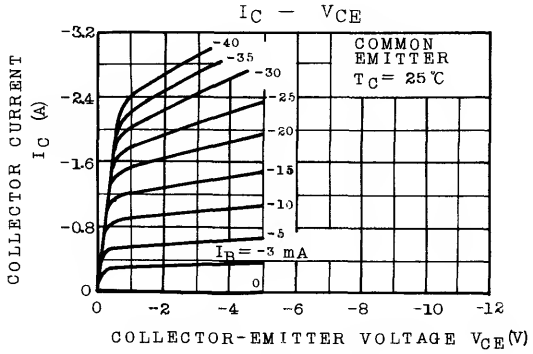
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-3	A
Emitter Current	I_E	3	A
Collector Power Dissipation (Tc=25°C)	Pc	10	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	Tstg	-55∿150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

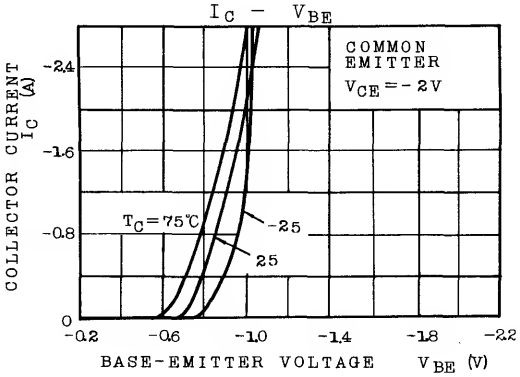
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-20V, I_E=0	-	-	-1.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	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

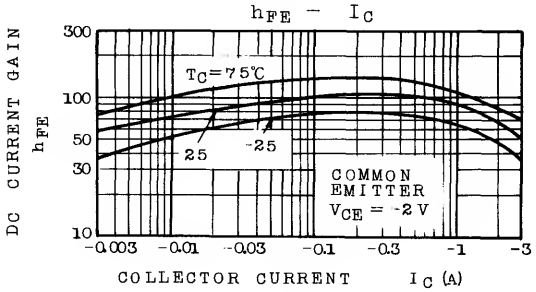
I_C — V_{CE}



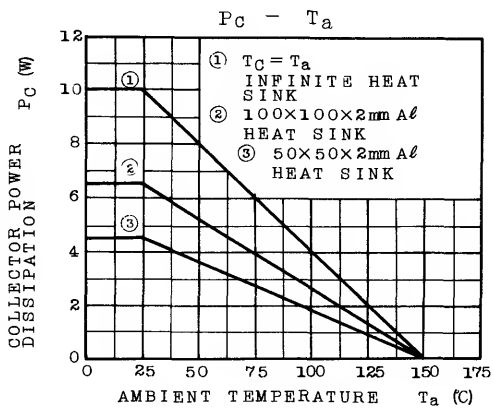
I_C — V_{BE}



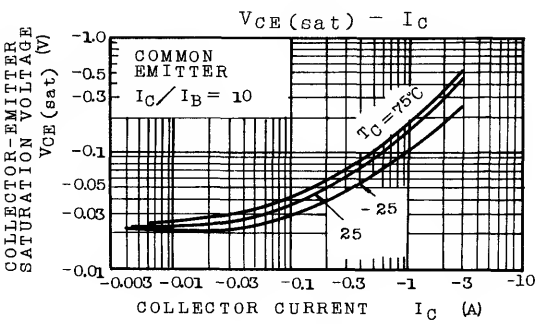
h_{FE} — I_C



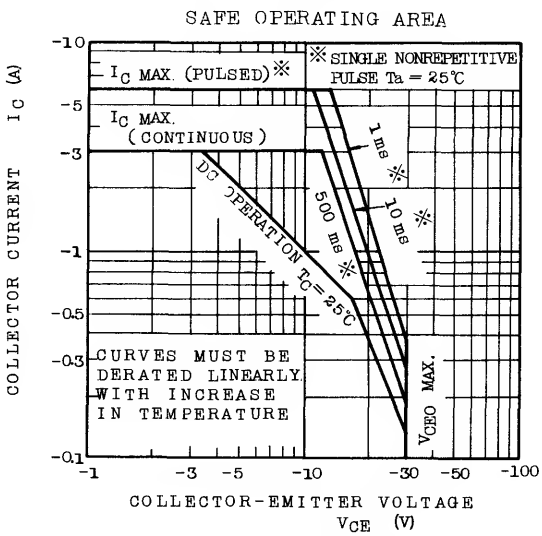
P_C — T_a



$V_{CE(sat)}$ — I_C



SAFE OPERATING AREA



I_C — V_{BE}