2SA1328

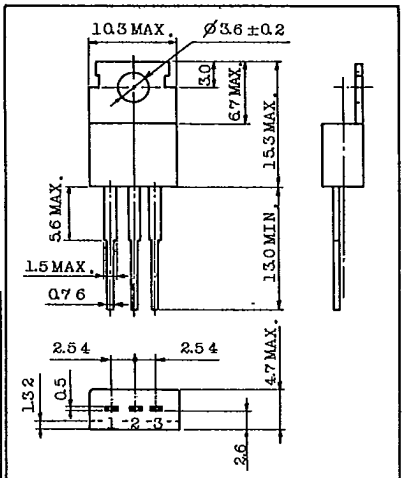
SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

HIGH CURRENT SWITCHING APPLICATIONS.

FEATURES:

. Low Collector Saturation Voltage
  : $V_{CE(sat)}$=-0.4V(Max.) at I_C=-6A
. High Speed Switching Time : t_{stg}=1.0μs(Typ.)
. Complementary to 2SC3345

Unit in mm



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

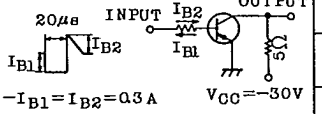
JEDEC	TO-220AB
EIAJ	SC-46
TOSHIBA	2-10A1A

Mounting Kit No. AC75
Weight : 1.9g

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-12	A
Base Current	I_B	-2	A
Collector Power Dissipation (Tc=25°C)	P_C	40	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

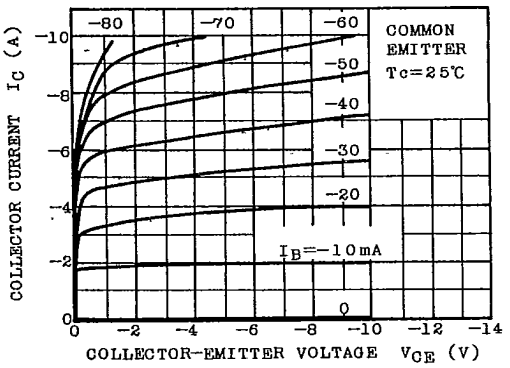
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-60V, I_E=0	-	-	-10	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-6V, I_C=0	-	-	-10	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-50	-	-	V
DC Current Gain		$h_{FE(1)}$ (Note)	V_{CE}=-1V, I_C=-1A	70	-	240	
		$h_{FE(2)}$	V_{CE}=-1V, I_C=-6A	40	-	-	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	I_C=-6A, I_B=-0.3A	-	-0.15	-0.4	V
	Base-Emitter	$V_{BE(sat)}$	I_C=-6A, I_B=-0.3A	-	-0.9	-1.2	
Transition Frequency		f_T	V_{CE}=-5V, I_C=-1A	-	70	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	320	-	pF
Switching Time	Turn-on Time	t_{on}		-	0.3	-	μs
	Storage Time	t_{stg}		-	1.0	-	
	Fall Time	t_f		-	0.5	-	

$-I_{B1}=I_{B2}$=0.3A
DUTY CYCLE≦1%

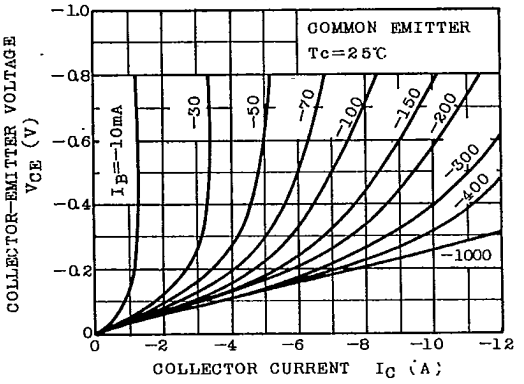
Note : $h_{FE(1)}$ Classification O : 70~140, Y : 120~240

2SA1328

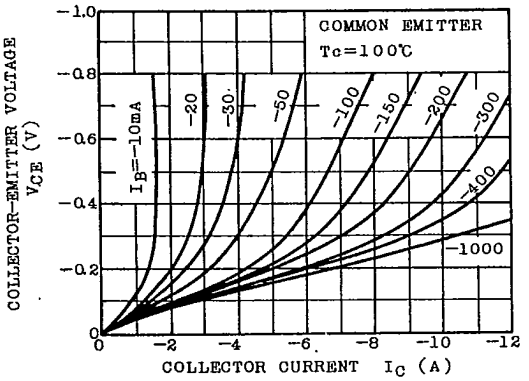
$I_C - V_{CE}$



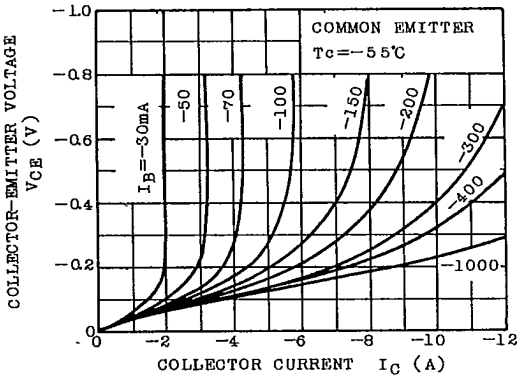
$V_{CE} - I_C$



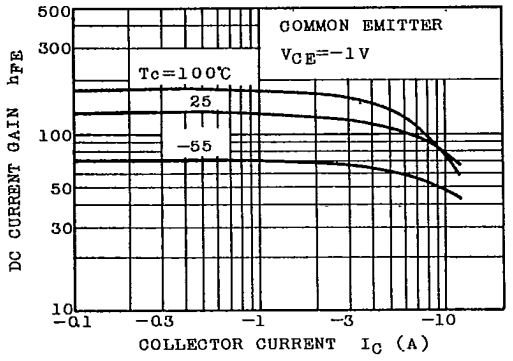
$V_{CE} - I_C$



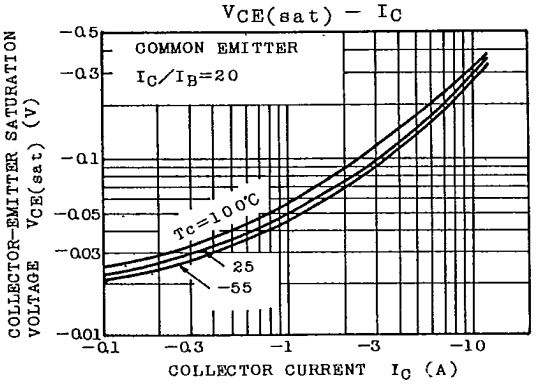
$V_{CE} - I_C$



$h_{FE} - I_C$

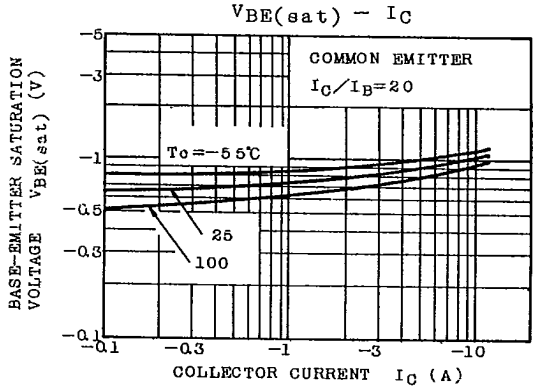


$V_{CE(sat)} - I_C$

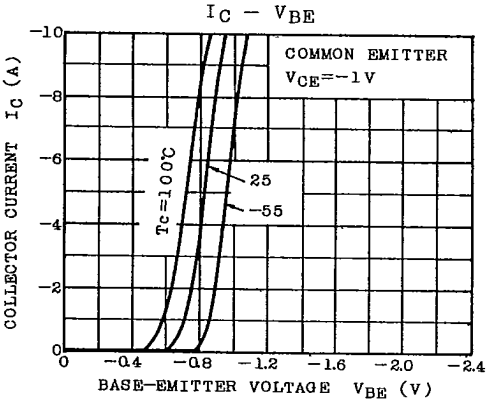


2SA1328

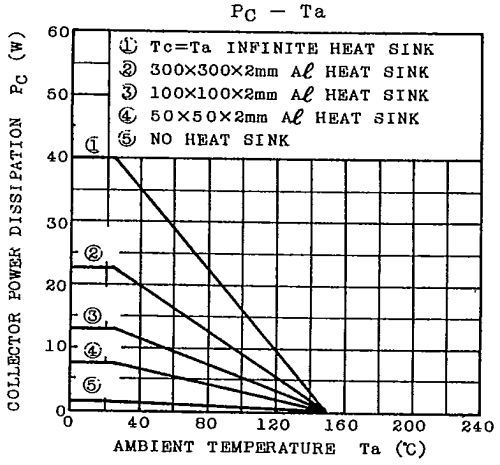
$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



$P_C - Ta$



SAFE OPERATING AREA