

# 2SC1624

# 2SC1625

SILICON NPN PLANAR TYPE

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07453 D T-33-07

Unit in mm

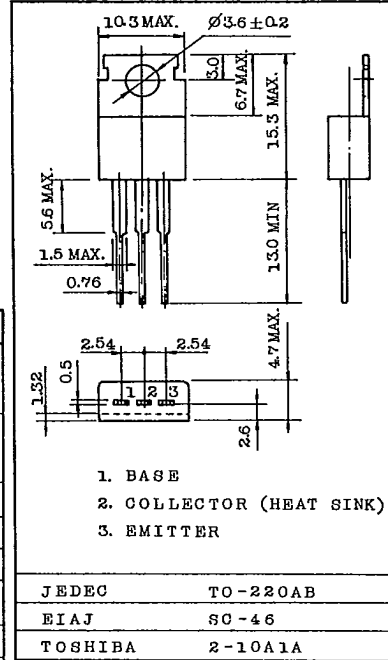
MEDIUM POWER AMPLIFIER APPLICATIONS.  
DRIVER STAGE AMPLIFIER APPLICATIONS.

## FEATURES:

High Breakdown Voltage :  $V_{CE0}=120V$  (2SC1624)  
Complementary to 2SA814 and 2SA815.

MAXIMUM RATINGS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	2SC1624	120	V
	2SC1625	100	
Collector-Emitter Voltage	2SC1624	120	V
	2SC1625	100	
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	1	A
Emitter Current	$I_E$	-1	A
Collector Power Dissipation ( $T_c=25^\circ C$ )	$P_C$	15	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$

ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=50V, I_E=0$	-	-	1.0	$\mu A$	
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	1.0	$\mu A$	
Collector-Emitter Breakdown Voltage	2SC1624	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	120	-	-	V
				100	-	-	
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5	-	-	V	
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=5V, I_C=150mA$	70	-	240		
	$h_{FE(2)}$	$V_{CE}=5V, I_C=500mA$	40	-	-		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	0.5	V	
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=5V, I_C=500mA$	-	-	1.0	V	
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=150mA$	10	30	-	MHz	
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1 MHz$	-	20	-	pF	

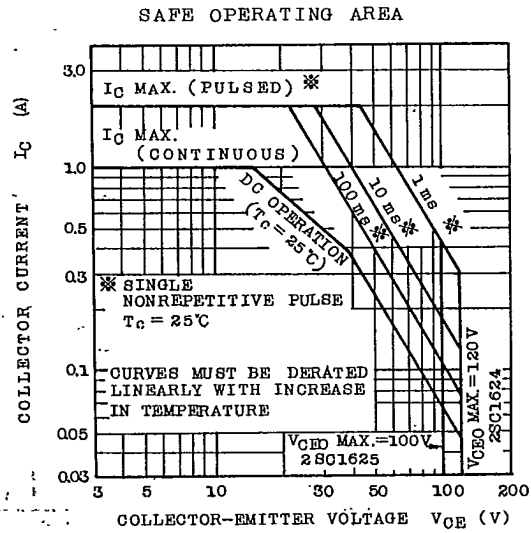
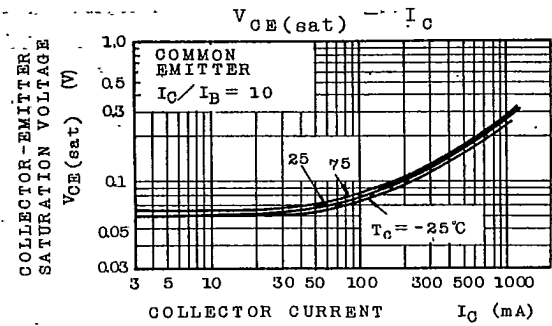
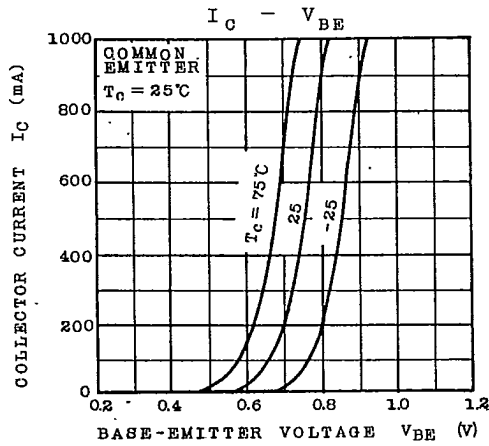
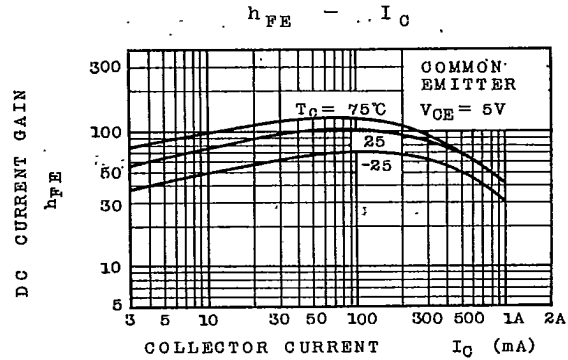
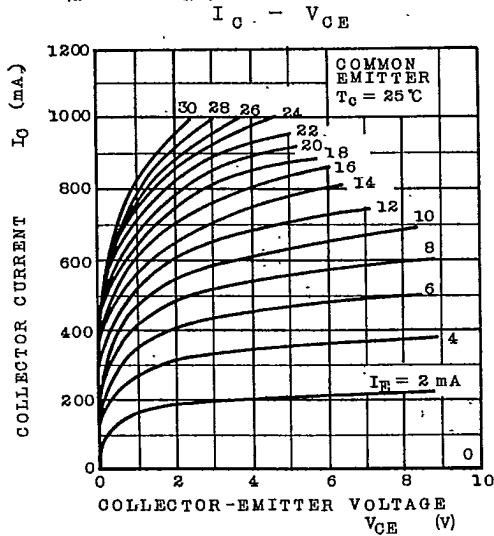
Note :  $h_{FE(1)}$  Classification : 0 : 70~140, Y : 120~240

TOSHIBA CORPORATION

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