

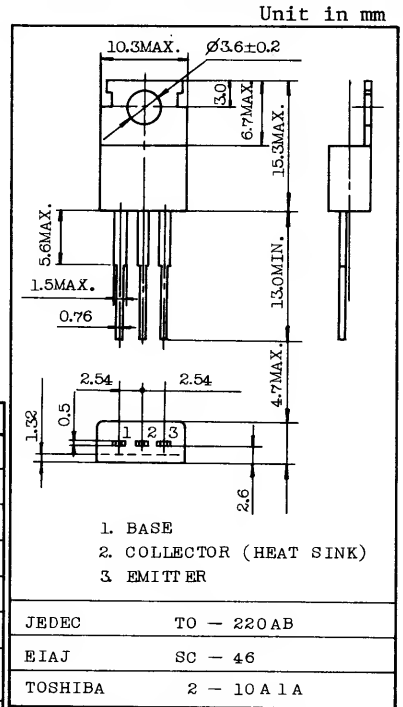
POWER AMPLIFIER APPLICATIONS.

FEATURES:

- High Breakdown Voltage :  $V_{CE0}=100V$
- Low Collector Saturation Voltage :  $V_{CE(sat)}=2.0V(\text{Max.})$
- Complementary to 2SB595.
- Recommended for 30W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	100	V
Collector-Emitter Voltage	$V_{CE0}$	100	V
Emitter-Base Voltage	$V_{EB0}$	5	V
Collector Current	$I_C$	5	A
Emitter Current	$I_E$	-5	A
Base Current	$I_B$	4	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



Mounting Kit No. AC75

Weight : 1.9g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CB0}$	$V_{CB}=100V, I_E=0$	-	-	100	μA
Emitter Cut-off Current	$I_{EB0}$	$V_{EB}=5V, I_C=0$	-	-	1	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=50mA, I_B=0$	100	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10mA, I_C=0$	5	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=5V, I_C=1A$	40	-	240	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=4A$	20	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=0.4A$	-	-	2.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=5V, I_C=1A$	-	-	1.5	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=1A$	-	12	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	100	-	pF

Note :  $h_{FE(1)}$  Classification R : 40~80, 0 : 70~140, Y : 120~240

# 2SD525

