

# 2SB552

## SILICON PNP TRIPLE DIFFUSED MESA TYPE

HIGH POWER AMPLIFIER APPLICATIONS.  
 HIGH POWER SWITCHING APPLICATIONS.  
 DC-DC CONVERTER APPLICATIONS.  
 REGULATOR APPLICATIONS.

**FEATURES:**

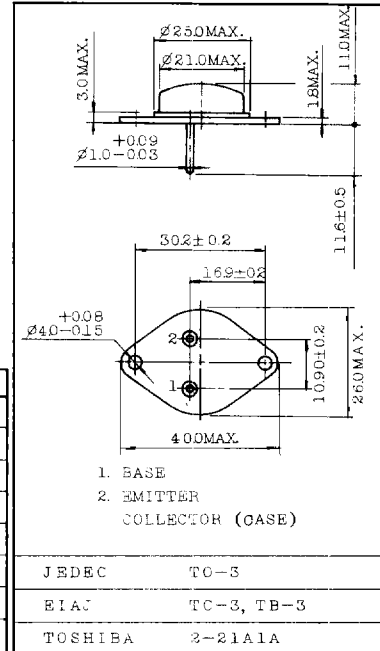
- High Collector Power Dissipation :  $P_C=150W$  ( $T_c=25^\circ C$ )
- High Collector Current :  $I_C=-15A$
- High Voltage :  $V_{CE0}=-180V$
- Complementary to 2SD552.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-220	V
Collector-Emitter Voltage	$V_{CE0}$	-180	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-15	A
Base Current	$I_B$	-3	A
Collector Power Dissipation ( $T_c=25^\circ C$ )	$P_C$	150	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-65~150	$^\circ C$

**INDUSTRIAL APPLICATIONS**

Unit in mm



Mounting Kit No. AC73

Weight : 12.9g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	$I_{CB0}$	$V_{CB}=-150V, I_E=0$	-	-	-100	$\mu A$	
Emitter Cut-off Current	$I_{EB0}$	$V_{EB}=-5V, I_C=0$	-	-	-1	mA	
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=-50mA, I_B=0$	-180	-	-	V	
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=-5V, I_C=-5A$	25	-	80		
	$h_{FE(2)}$	$V_{CE}=-5V, I_C=-15A$	10	15	-		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-10A, I_B=-1A$	-	-	-2.0	V	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-10A, I_B=-1A$	-	-1.6	-2.5	V	
Transition Frequency	$f_T$	$V_{CE}=-10V, I_C=-1A$	-	3.5	-	MHz	
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-50V, I_E=0, f=1MHz$	-	300	-	pF	
Switching Time	Turn-on Time	$t_{on}$		-	1	-	$\mu s$
	Storage Time	$t_{stg}$		-	4	-	
	Fall Time	$t_f$		-	0.5	-	

Note :  $h_{FE(1)}$  Classification BN : 25~50, R : 40~80

