

2SB677

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)
(DARLINGTON POWER)

SWITCHING APPLICATIONS.

HAMMER DRIVE, PULSE MOTOR DRIVE APPLICATIONS.

POWER AMPLIFIER APPLICATIONS.

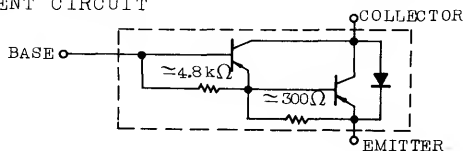
FEATURES:

- High DC Current Gain
: $h_{FE}=2000$ (Min.) ($V_{CE}=-2V$, $I_C=-1A$)
- Low Saturation Voltage
: $V_{CE(sat)}=-1.5V$ (Max.) ($I_C=-2A$)

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

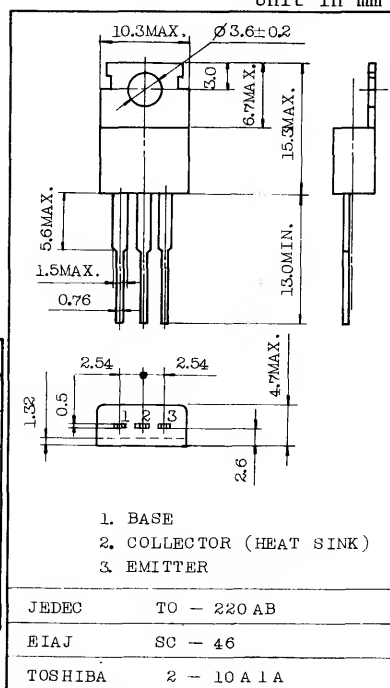
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-3	A
Collector Power Dissipation ($T_c=25^\circ C$)	P_C	25	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

EQUIVALENT CIRCUIT



INDUSTRIAL APPLICATIONS

Unit in mm



Mounting Kit No. AC75
Weight : 1.9g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-60V$, $I_E=0$	-	-	-20	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V$, $I_C=0$	-	-	-2.5	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-25mA$, $I_B=0$	-40	-	-	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2V$, $I_C=-1A$	2000	-	-	
	$h_{FE(2)}$	$V_{CE}=-2V$, $I_C=-3A$	1000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-2A$, $I_B=-4mA$	-	-	-1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-2A$, $I_B=-4mA$	-	-	-2.0	V
Switching Time	Turn-on Time	t_{on}	-	0.30	-	μs
	Storage Time	t_{stg}	-	0.60	-	
	Fall Time	t_f	-	0.25	-	

