

INDUSTRIAL APPLICATIONS

Unit in mm

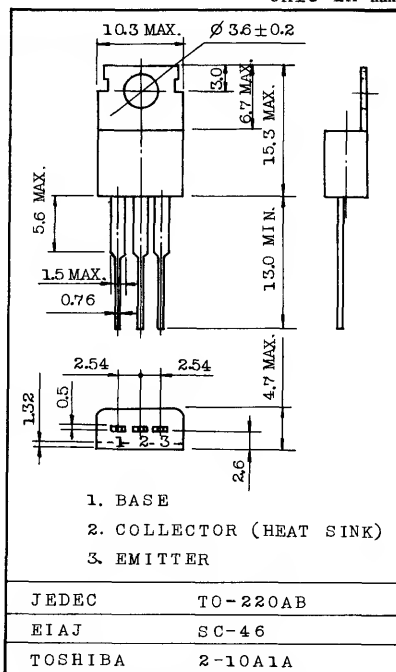
HIGH CURRENT SWITCHING APPLICATIONS.
POWER AMPLIFIER APPLICATIONS.

FEATURES:

- High Collector Current : $I_C = -7A$
- Low Collector Saturation Voltage : $V_{CE(sat)} = -0.5V(\text{Max.})$ at $I_C = -4A$
- High Collector Power Dissipation.
- Complementary to 2SD843.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-80	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-7	A
Collector Power Dissipation	$T_a = 25^\circ C$	P_C	1.5
	$T_c = 25^\circ C$	P_C	40
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



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}	$V_{CB} = -100V, I_E = 0$	-	-	-5	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-5	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA, I_B = 0$	-80	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -1V, I_C = -1A$	70	-	240	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -4A$	30	-	-	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	-	-0.3	-0.5	V
	Base-Emitter	$V_{BE(sat)}$	-	-0.9	-1.4	
Transition Frequency	f_T	$V_{CE} = -4V, I_C = -1A$	-	10	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1 \text{ MHz}$	-	250	-	pF
Switching Time	Turn-on Time	t_{on}	-	0.4	-	μs
	Storage Time	t_{stg}	-	2.5	-	
	Fall Time	t_f	-	0.5	-	

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

STATIC CHARACTERISTICS

