

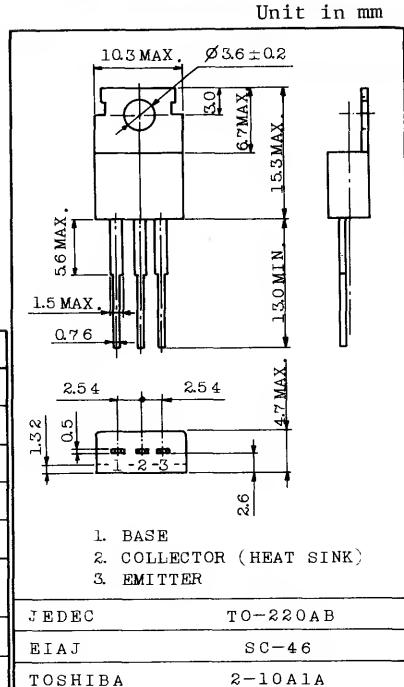
## HIGH CURRENT SWITCHING APPLICATIONS.

## FEATURES:

- . Low Collector Saturation Voltage  
:  $V_{CE}(\text{sat}) = -0.4V(\text{Max.})$  at  $I_C = -6A$
- . High Speed Switching Time :  $t_{\text{stg}} = 1.0\mu\text{s}(\text{Typ.})$
- . Complementary to 2SC3346

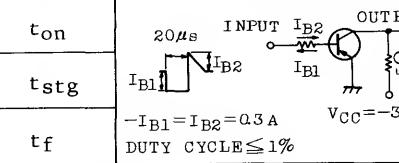
MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-80	V
Collector-Emitter Voltage	$V_{CEO}$	-80	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-12	A
Base Current	$I_B$	-2	A
Collector Power Dissipation ( $T_c = 25^\circ\text{C}$ )	$P_C$	40	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	-55 ~ 150	$^\circ\text{C}$

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

Mounting Kit No. AC75  
Weight : 1.9g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -80V, I_E = 0$	-	-	-10	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -6V, I_C = 0$	-	-	-10	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(\text{BR})\text{CEO}}$	$I_C = -50\text{mA}, I_B = 0$	-80	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE} = -1V, I_C = -1A$	70	-	240	
	$h_{FE}(2)$	$V_{CE} = -1V, I_C = -6A$	40	-	-	
Saturation Voltage	Collector-Emitter	$V_{CE}(\text{sat})$ $I_C = -6A, I_B = -0.3A$	-	-0.2	-0.4	V
	Base-Emitter	$V_{BE}(\text{sat})$ $I_C = -6A, I_B = -0.3A$	-	-0.9	-1.2	
Transition Frequency	$f_T$	$V_{CE} = -5V, I_C = -1A$	-	50	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1\text{MHz}$	-	400	-	pF
Switching Time	Turn-on Time	$t_{\text{on}}$	-	0.3	-	$\mu\text{s}$
	Storage Time	$t_{\text{stg}}$	-	1.0	-	
	Fall Time	$t_f$	-	0.5	-	



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

# 2SA1329

