SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SC2444

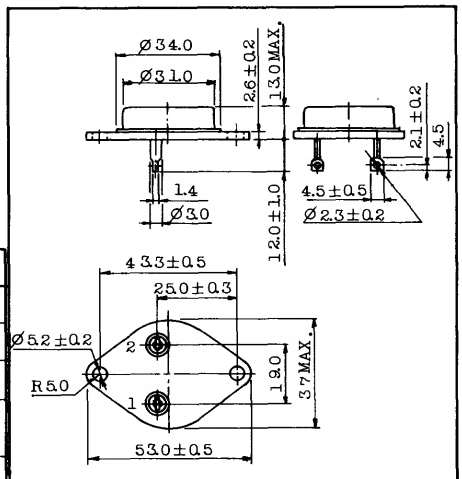
INDUSTRIAL APPLICATIONS

HIGH POWER SWITCHING APPLICATIONS.
HIGH FREQUENCY INVERTER APPLICATIONS.
SWITCHING REGULATER APPLICATIONS.

FEATURES:

. High Collector Emitter Voltage

Unit in mm



1. BASE
2. EMITTER
COLLECTOR (CASE)

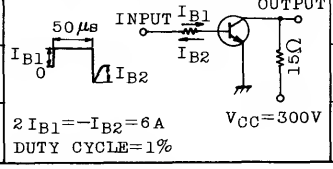
JEDEC	—
EIAJ	TC-19, TB-30
TOSHIBA	2-31B1A

Mounting kit No. AC227 & AC88B
Weight : 50g

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	500	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	30	A
Peak Collector Current	$I_{C\ peak}$	60 (1 ms)	A
Base Current	I_B	10	A
Collector Power Dissipation	P_C	250	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65 ~ 150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=500V, I_E=0	-	-	0.2	mA
Emitter Cut-off Current		I_{EBO}	V_{EB}=5V, I_C=0	-	-	0.2	mA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=10mA, I_B=0	400	-	-	V
DC Current Gain		h_{FE}	V_{CE}=5V, I_C=20A	10	-	-	
			V_{CE}=5V, I_C=30A	5	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=20A, I_B=3A	-	-	1.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$		-	-	2.0	V
Collector Output Capacitance		C_{ob}	V_C=50V, I_E=0, f=1MHz	-	400	-	pF
Switching Time	Turn-on Time	t_{on}		-	-	1.5	μs
	Storage Time	t_{stg}		-	-	3.0	
	Fall Time	t_f		-	-	1.0	

$2I_{B1}=-I_{B2}=6A$
DUTY CYCLE=1%