

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07504 07-33-15

SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SC2204

2SC2220

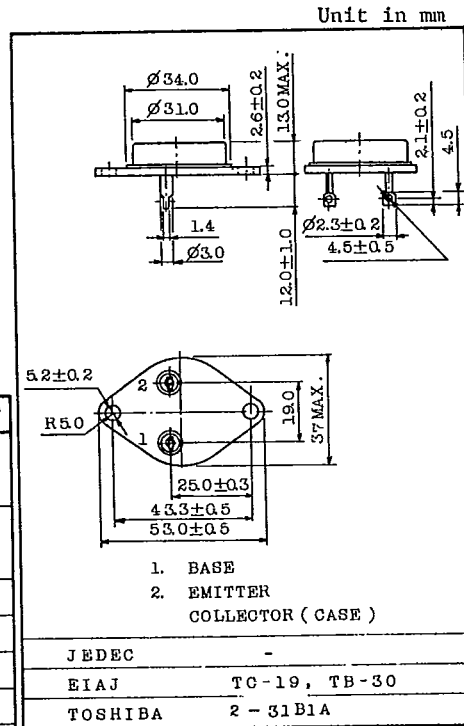
HIGH POWER SWITCHING APPLICATIONS.
HIGH FREQUENCY INVERTOR APPLICATIONS.

FEATURES :

- High Voltage : $V_{CE0}=400V$ (Min.) (2SC2204)
 $V_{CE0}=300V$ (Min.) (2SC2220)
 $V_{CBO}=800V$ (Min.) (2SC2204)
 $V_{CBO}=500V$ (Min.) (2SC2220)
- High Speed Switching : $t_f=0.7\mu s$ (Typ.)

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SC2204	V_{CBO}	800	V
	2SC2220		500	
Collector-Emitter Voltage	2SC2204	V_{CEO}	400	V
	2SC2220		300	
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	30	A
Emitter Current		I_E	-30	A
Base Current		I_B	15	A
Collector Power Dissipation		P_C	250	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	-65~150	$^\circ C$



Mounting kit No.AC63
Weight : 46g

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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	2SC2204	I_{CBO}	$V_{CB}=800V, I_E=0$	-	-	1.0	mA
	2SC2220		$V_{CB}=500V, I_E=0$	-	-	5	
Emitter Cut-off Current		I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	5	mA
Collector-Emitter Breakdown Voltage	2SC2204	$V_{(BR)CEO}$	$I_C=20mA, I_B=0$	400	-	-	V
	2SC2220			300	-	-	
DC Current Gain		h_{FE}	$V_{CE}=5V, I_C=30A$	10	-	-	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	$I_C=30A, I_B=6A$	-	-	1.5	V
	Base-Emitter	$V_{BE(sat)}$	$I_C=30A, I_B=6A$	-	-	2.0	
Collector Output Capacitance		C_{ob}	$V_{CB}=50V, I_E=0, f=1MHz$	-	400	-	pF
Switching Time	Turn-on Time	t_{on}		-	1.2	1.5	μs
	Storage Time	t_{stg}		-	3.0	4.0	
	Fall Time	t_f		-	0.7	1.0	

TOSHIBA CORPORATION