

9097250 TOSHIBA (DISCRETE/OPTO)

56C 08022 0 T-33-13

SILICON NPN TRIPLE DIFFUSED TYPE

2N3772

HIGH POWER AMPLIFIER, POWER SWITCHING
DC-DC CONVERTER AND REGULATOR APPLICATIONS

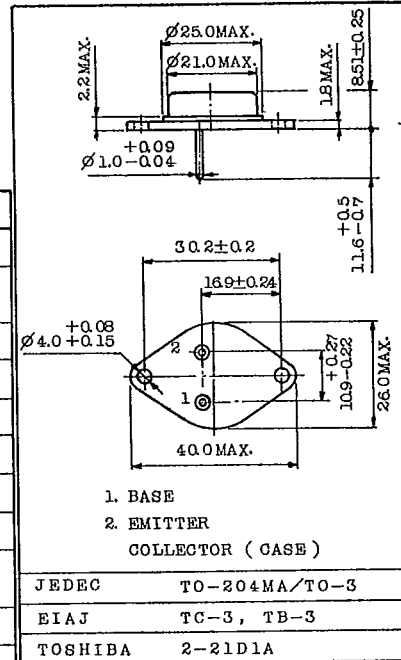
FEATURES:

- High Collector Dissipation : $P_C=150W$ ($T_c=25^\circ C$)
- High Collector Current : $I_C=20A$ (D.C)

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

CHARACTERISTIC		SYMBOL	RATING	UNIT	
※	Collector-Base Voltage	V_{CB0}	100	V	
※	Collector-Emitter Voltage ($V_{BE}=-1.5V$, $R_{BE}=100\Omega$)	V_{CEX}	100	V	
※	Collector-Emitter Voltage	V_{CEO}	60	V	
※	Emitter-Base Voltage	V_{EBO}	7	V	
※	Collector Current	DC	I_C	20	A
		Peak	I_{CM}	30	A
※	Base Current	DC	I_B	5	A
		Peak	I_{BM}	15	A
※	Collector Power Dissipation ($T_c=25^\circ C$)	P_C	150	W	
※	Junction Temperature	T_j	200	$^\circ C$	
※	Storage Temperature Range	T_{stg}	-65 ~ 200	$^\circ C$	

Unit in mm



Weight : 12.6g

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	mA
※	Collector Cut-off Current	I_{CEX}	$V_{CE}=100V$, $V_{BE}=-1.5V$	-	-	5	mA
※	Collector Cut-off Current	I_{CEX}	$V_{CE}=30V$, $V_{BE}=-1.5V$ $T_c=150^\circ C$	-	-	10	mA
※	Collector Cut-off Current	I_{CEO}	$V_{CE}=50V$, $I_B=0$	-	-	10	mA
※	Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V$, $I_C=0$	-	-	5	mA
※	Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=200mA$, $I_B=0$	60	-	-	V
※	DC Current Gain	h_{FE}	$V_{CE}=4V$, $I_C=10A$	15	-	60	
		h_{FE}	$V_{CE}=4V$, $I_C=20A$	5	-	-	
※	Base-Emitter Voltage	V_{BE}	$V_{CE}=4V$, $I_C=10A$	-	1.0	2.2	V
※	Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10A$, $I_B=1A$	-	0.3	1.4	V
		$V_{CE(sat)}$	$I_C=20A$, $I_B=4A$	-	-	4	V
※	Transition Frequency	f_T	$V_{CE}=4V$, $I_C=1A$	0.2	-	-	MHz
※	Small Signal Current Gain	$ h_{fe} $	$V_{CE}=4V$, $I_C=1A$, $f=1kHz$	40	-	-	

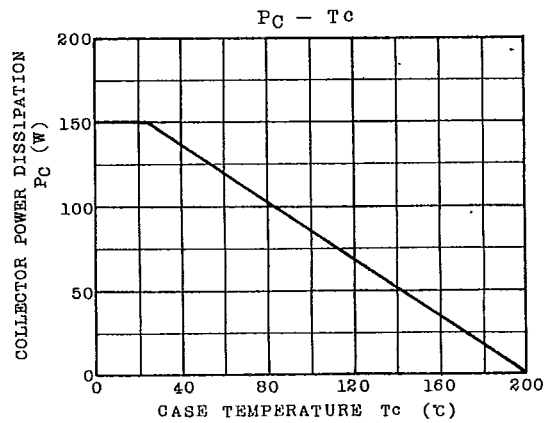
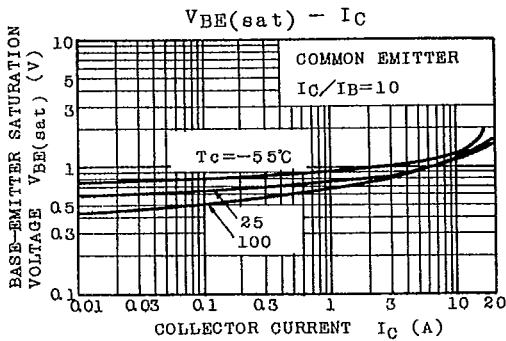
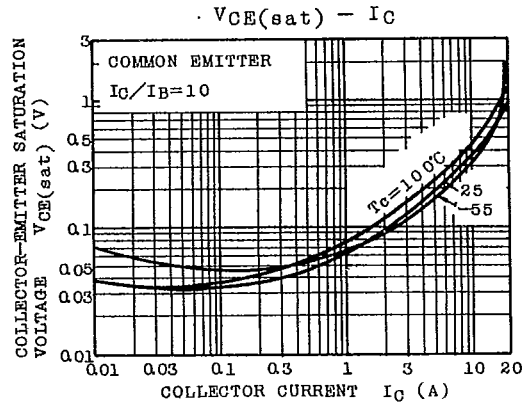
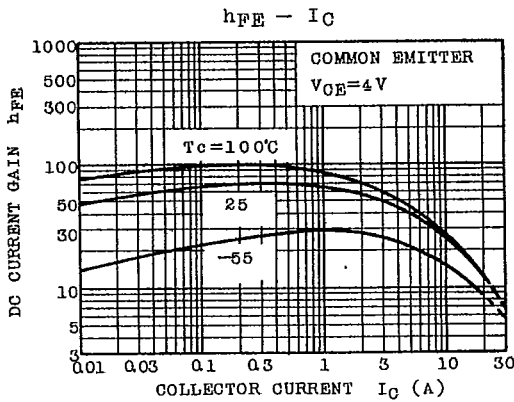
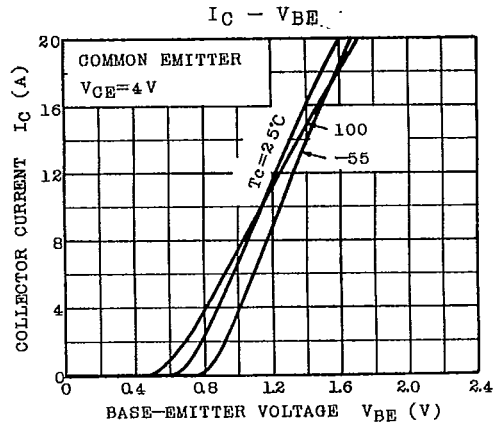
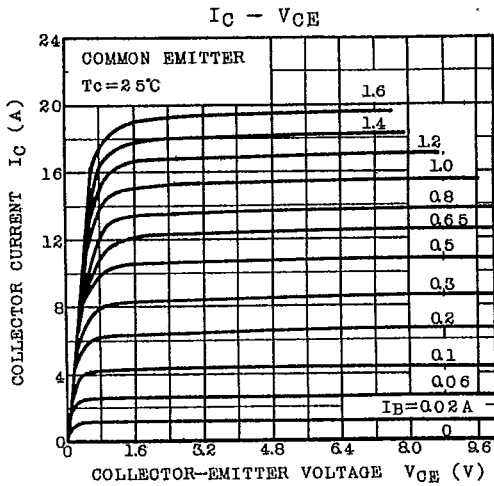
※ In Accordance with JEDEC Registration Data.

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