

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07906 D T-33-11

SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SD1279

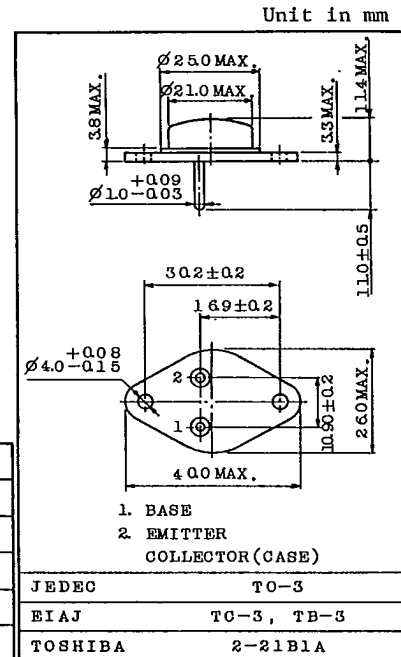
COLOR TV HORIZ. DEFLECTION OUTPUT APPLICATIONS.
SWITCHING REGULATOR APPLICATIONS.

FEATURES:

- . High Voltage : $V_{CBO}=1400V$
- . Low Saturation Voltage
: $V_{CE(sat)}=5V(\text{Max.})$ ($I_C=8A$, $I_B=2A$)
- . High Speed : $t_f=1.0\mu s(\text{Max.})$
- . Glass Passivated Collector-Base Junction.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	1400	V
Collector-Emitter Voltage	V_{CEO}	600	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	10	A
Base Current	I_B	5	A
Collector Power Dissipation	P_C	50	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-65~150	$^\circ C$



Weight : 17.0g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=500V$, $I_E=0$	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V$, $I_C=0$	-	-	1	mA
DC Current Gain	h_{FE}	$V_{CE}=5V$, $I_C=2A$	8	22	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=8A$, $I_B=2A$	-	-	5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=8A$, $I_B=2A$	-	-	1.6	V
Transition Frequency	f_T	$V_{CE}=10V$, $I_C=0.1A$	-	3	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1MHz$	-	165	-	pF
Collector Current Fall Time	t_f	$I_{CP}=7A$, $I_{B1}(\text{end})=1.5A$ (Fig.)	-	-	1.0	μs

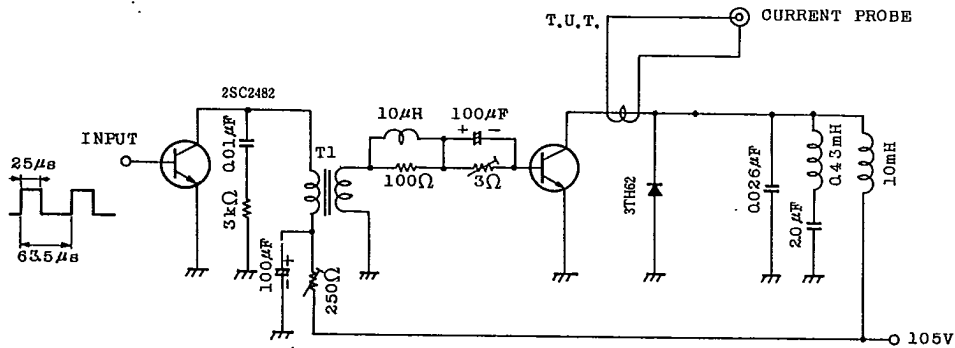
TOSHIBA CORPORATION

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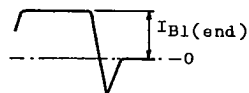
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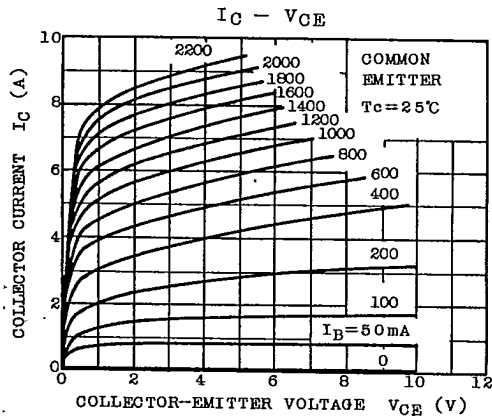
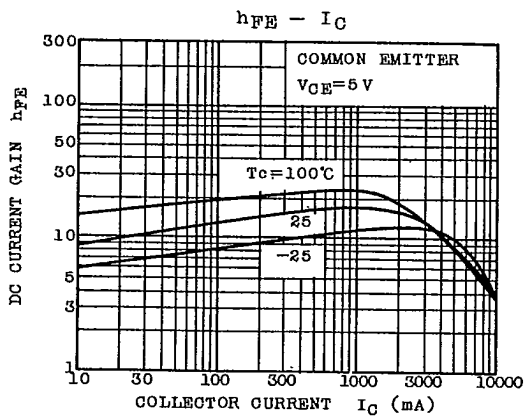
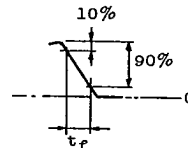
Fig. t_f TEST CIRCUIT



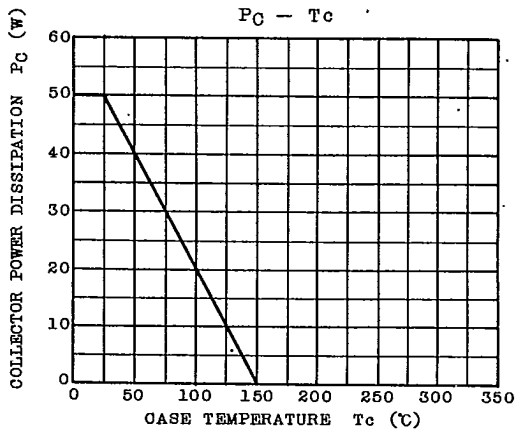
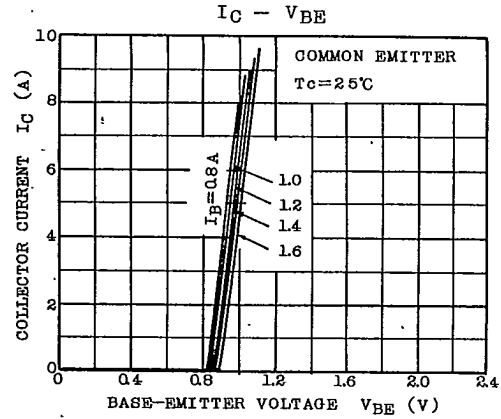
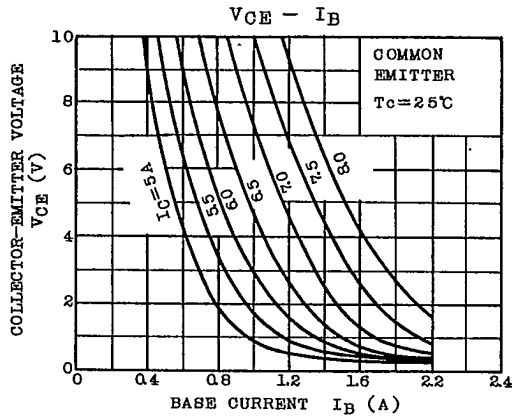
BASE CURRENT



COLLECTOR CURRENT



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