

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07906

D T-33-11

SILICON NPN TRIPLE DIFFUSED MESA TYPE**2SD1279**

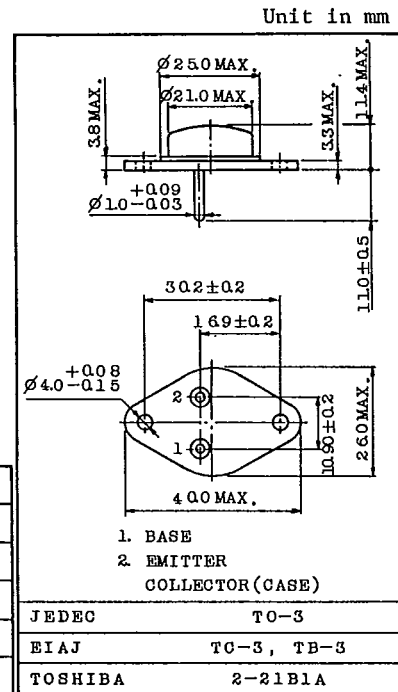
COLOR TV HORIZ. DEFLECTION OUTPUT APPLICATIONS.  
SWITCHING REGULATOR APPLICATIONS.

## FEATURES:

- . High Voltage :  $V_{CB0}=1400V$
- . 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	$V_{CB0}$	1400	V
Collector-Emitter Voltage	$V_{CE0}$	600	V
Emitter-Base Voltage	$V_{EB0}$	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	$I_{CB0}$	$V_{CB}=500V$ , $I_E=0$	-	-	10	$\mu A$
Emitter Cut-off Current	$I_{EB0}$	$V_{EB}=5V$ , $I_C=0$	-	-	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	$\mu s$

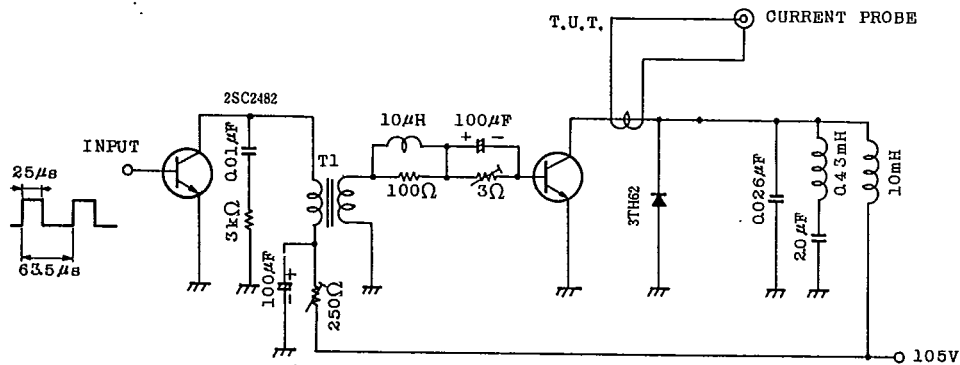
TOSHIBA CORPORATION

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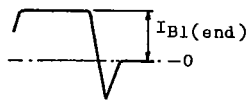
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Fig.  $t_f$  TEST CIRCUIT



BASE CURRENT



COLLECTOR CURRENT

