

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07887 D T-33-13

2SD1208

SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

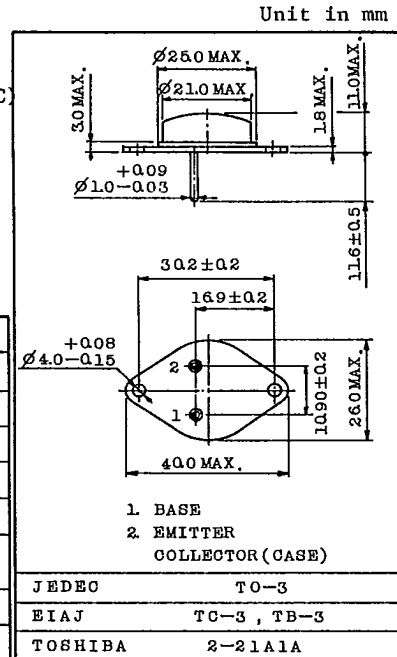
POWER REGULATOR FOR LINE OPERATED TV.

FEATURES:

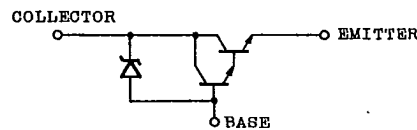
- . Excellent Wide Safe Operating Area (100W.Sec at $T_c=25^{\circ}\text{C}$)
- . Included Abalanche Diode : $V_Z=60\pm 15\text{V}$
- . High DC Current Gain : $h_{FE}=2000 \sim 20000$
- . Darlington Connected Type.

MAXIMUM RATINGS (T_a=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	60 ± 15	V
Collector-Emitter Voltage	V_{CE0}	60 ± 15	V
Emitter-Base Voltage	V_{EB0}	6	V
Collector Current (Continuous)	I_C	5	A
Collector Current (Peak)	I_{CP}	20	A
Collector Power Dissipation ($T_c = 25^\circ\text{C}$)	P_C	100	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-65 \sim 150$	$^\circ\text{C}$



EQUIVALENT CIRCUIT



Weight : 12.0g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

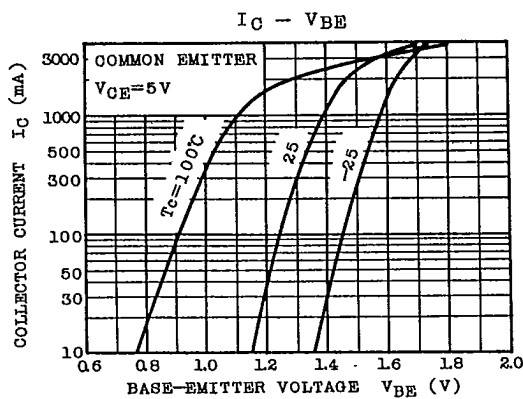
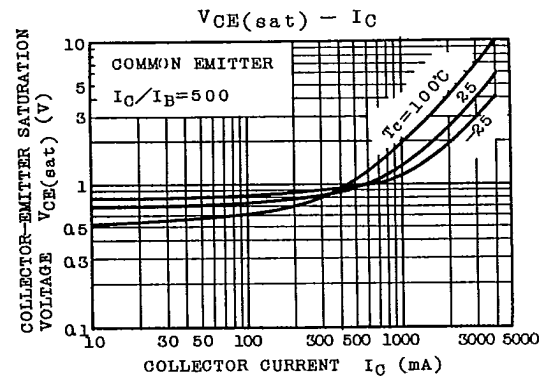
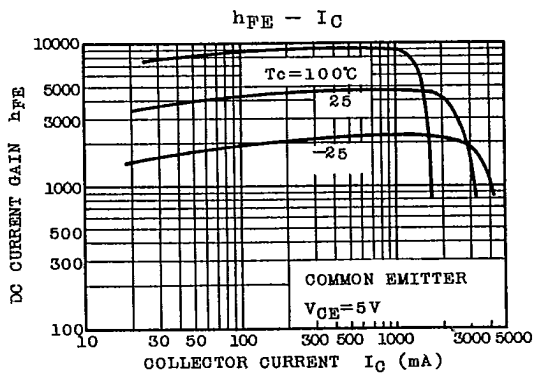
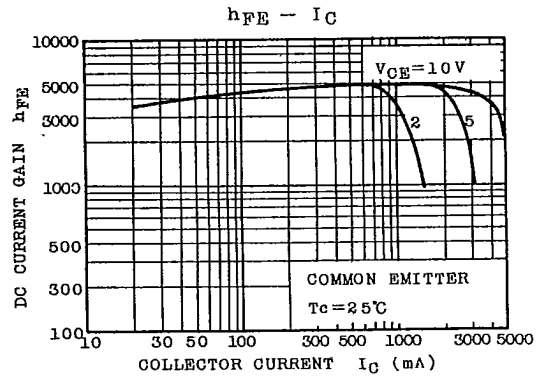
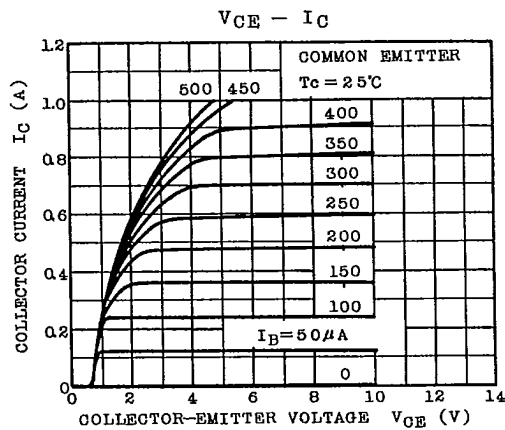
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10mA, I_E=0$	45	60	75	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=100mA, I_B=0$	45	60	75	V
Emitter Cut-off Current	I_{EBO}	$V_{EB}=6V, I_C=0$	-	-	100	μA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=0.5A$	2000	-	20000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}^{(1)}$	$I_C=0.5A, I_B=1mA$	-	-	1.5	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}^{(2)}$	$I_C=1A, I_B=1mA$	-	-	2.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=0.5A$	-	-	1.8	V
Allowable Energy ($T_c=25^{\circ}C$)	E_T	Application Circuit	100	-	-	W·sec

[illegible]

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07888

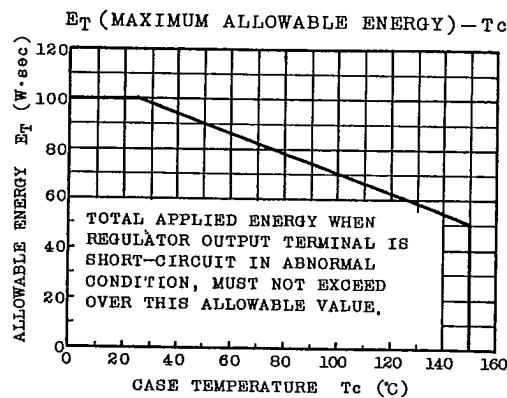
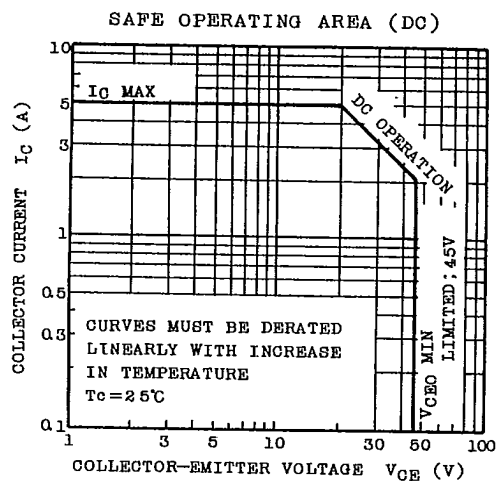
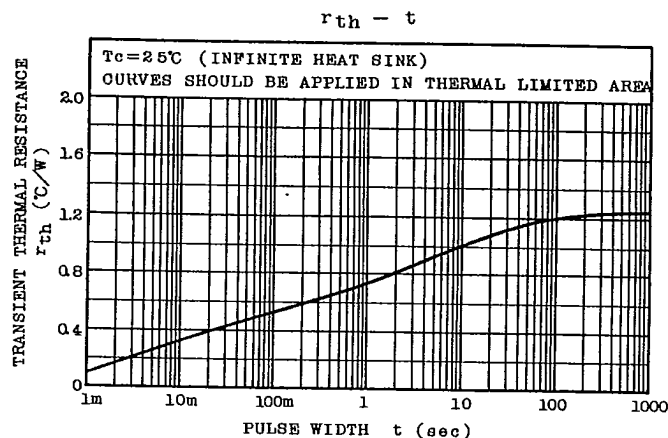
DT-33-13

2SD1208

TOSHIBA CORPORATION

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07889 DT-33-13

2SD1208

TOSHIBA CORPORATION

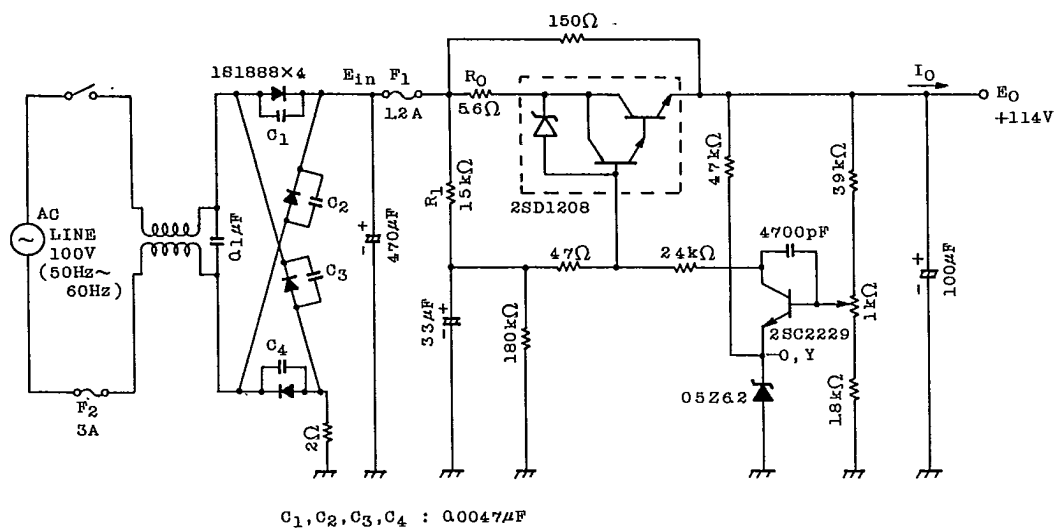
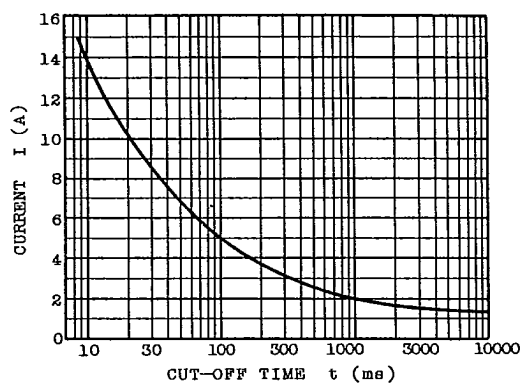
9097250 TOSHIBA (DISCRETE/OPTO)

56C 07890

D T-33-13

2SD1208

APPLICATION CIRCUIT

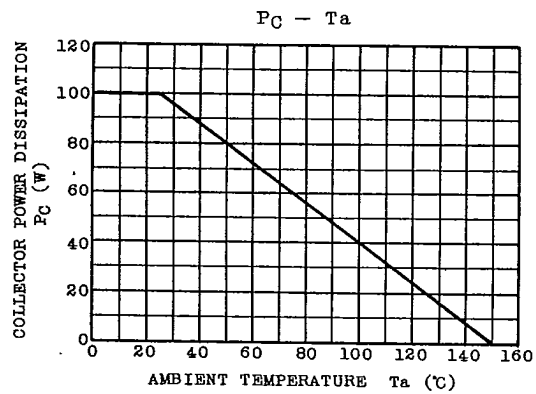
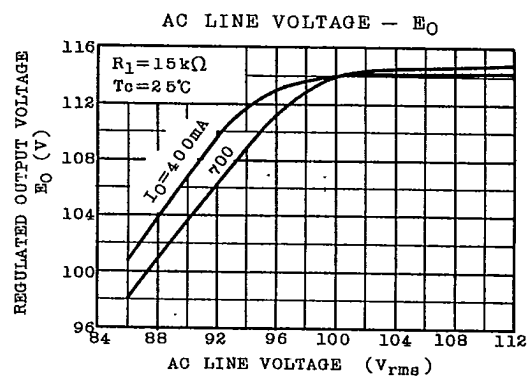
FUSE F_1 ; I-t CHARACTERISTIC

TOSHIBA CORPORATION

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07891

D T-33-13

2SD1208

TOSHIBA CORPORATION