

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07596 D 7-33-13

SILICON NPN TRIPLE DIFFUSED TYPE

**2SC2790**

INDUSTRIAL APPLICATIONS

Unit in mm

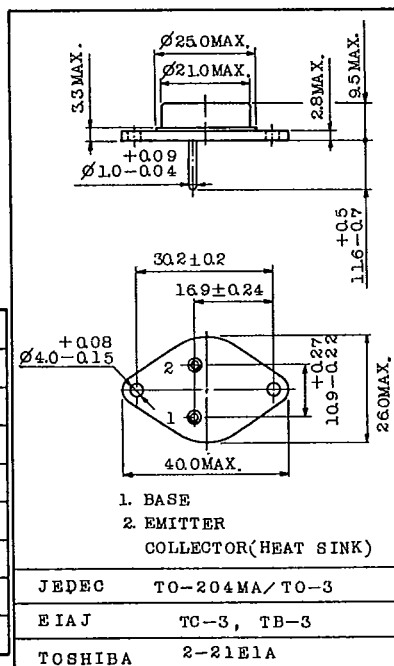
SWITCHING REGULATOR AND HIGH VOLTAGE  
SWITCHING APPLICATIONS.  
HIGH SPEED DC-DC CONVERTER APPLICATION.

## FEATURES:

- Excellent Switching Times  
:  $t_r=1.0\mu s$  Max. ,  $t_f=1.0\mu s$  Max. at  $I_C=0.5A$
- High Collector Breakdown Voltage :  $V_{CE0}=800V$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector - Base Voltage	$V_{CB0}$	850	V
Collector - Emitter Voltage	$V_{CE0}$	800	V
Emitter - Base Voltage	$V_{EB0}$	7	V
Collector Current	$I_C$	2	A
Base Current	$I_B$	1	A
Collector Power Dissipation ( $T_c=25^\circ C$ )	$P_C$	80	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$

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

Weight : 16g

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=800V, I_E=0$	-	-	100	$\mu A$
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	1	mA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	850	-	-	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	800	-	-	V
DC Current Gain		$h_{FE}$ (Note)	$V_{CE}=5V, I_C=0.5A$	17	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$ (Note)	$I_C=0.5A, I_B=0.05A$	-	-	1.0	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$ (Note)	$I_C=0.5A, I_B=0.05A$	-	-	1.5	V
Switching Time	Rise Time	$t_r$		-	-	1.0	$\mu s$
	Storage Time	$t_{stg}$		-	-	4.0	
	Fall Time	$t_f$		-	-	1.0	

Note : Pulse Test : Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$ 

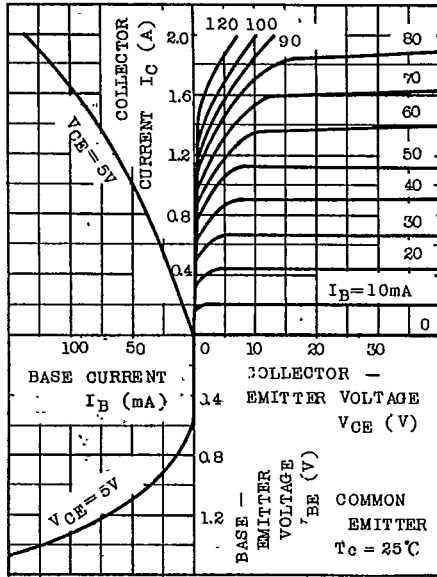
TOSHIBA CORPORATION

9097250 TOSHIBA (DISCRETE/OPTO)

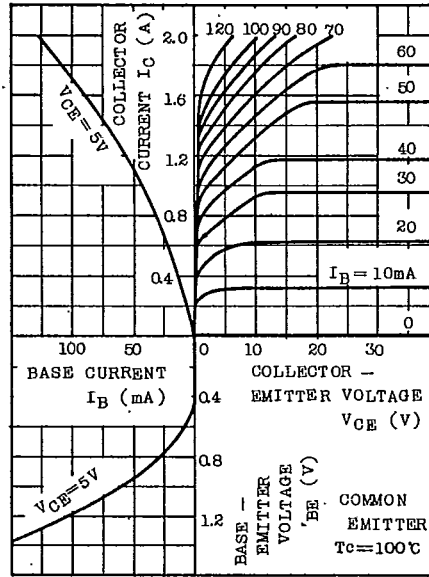
56C 07597 0 T-33-13

**2SC2790**

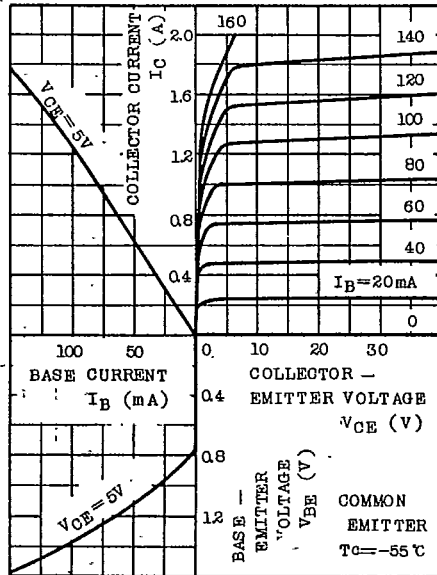
STATIC CHARACTERISTICS



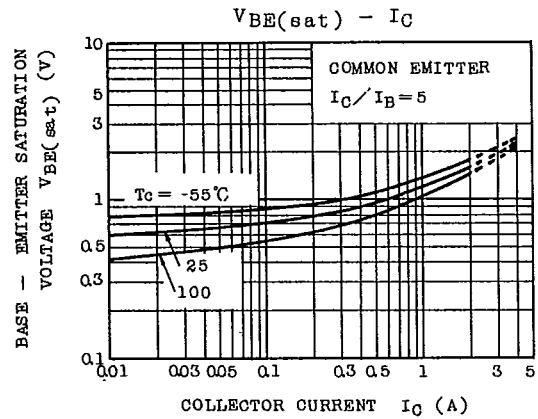
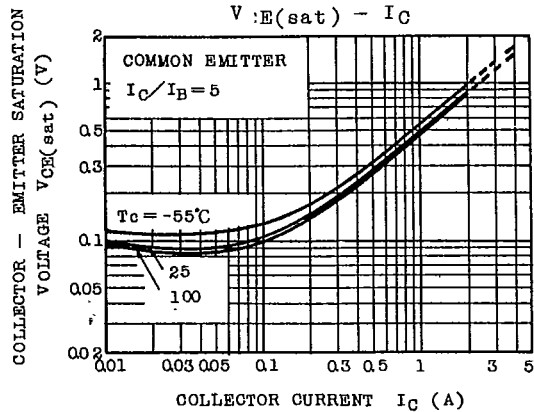
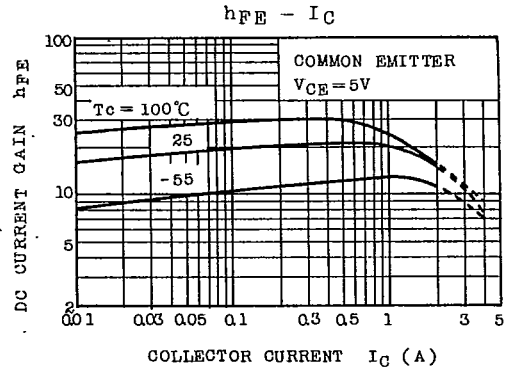
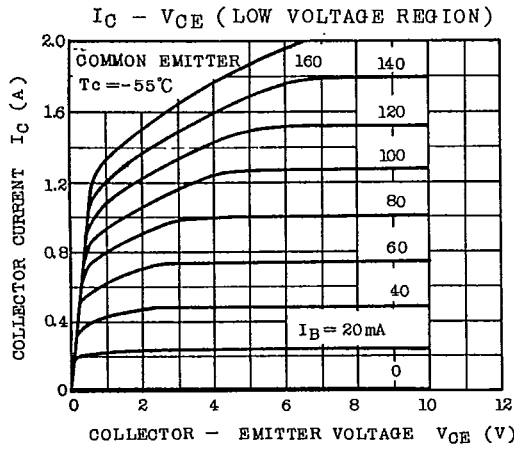
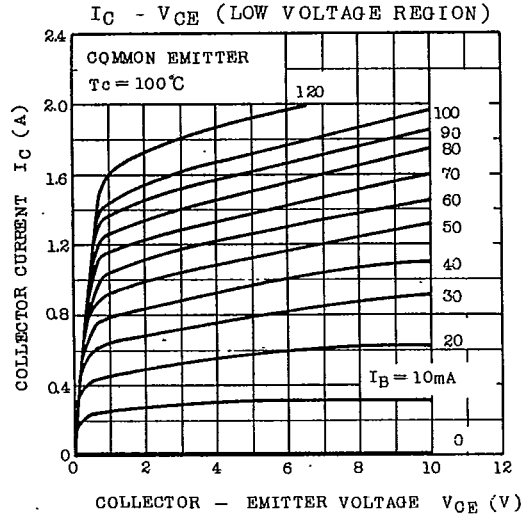
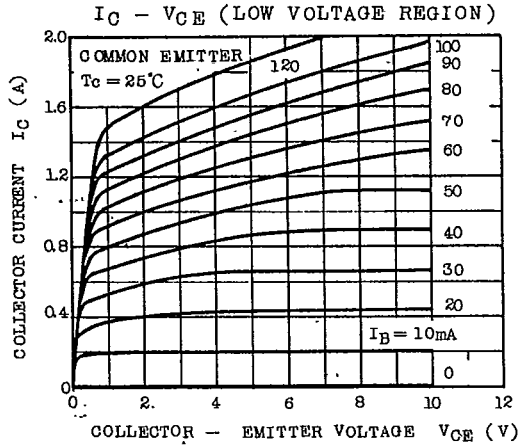
STATIC CHARACTERISTICS



STATIC CHARACTERISTICS



TOSHIBA CORPORATION



9097250 TOSHIBA (DISCRETE/OPTO)

56C 07599 DT-33-13

# 2SC2790

