

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07643 DT-33-11

# 2SC3148

SILICON NPN TRIPLE DIFFUSED TYPE

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

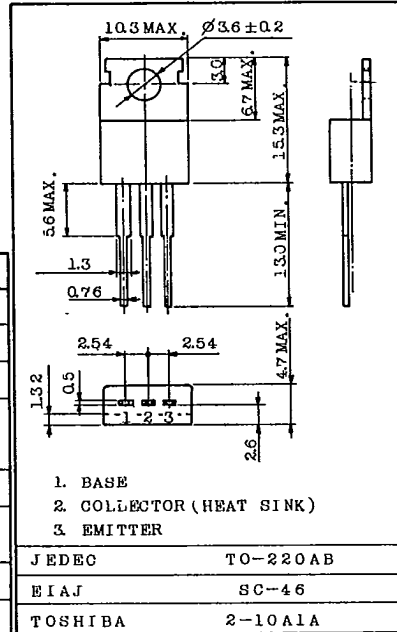
**FEATURES:**

- Excellent Switching Times ( $I_C=0.8A$ )  
 $t_r=1.0\mu s$  Max.,  $t_f=1.0\mu s$  Max.
- High Collector-Emmitter Breakdown Voltage :  $V_{CEO}=800V$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	900	V
Collector-Emmitter Voltage	$V_{CEO}$	800	V
Emmitter-Base Voltage	$V_{EBO}$	7	V
Collector Current	DC	$I_C$	3
	Peak	$I_{CP}$	5
Base Current	$I_B$	1	A
Collector Power Dissipation ( $T_c=25^\circ C$ )	$P_C$	40	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$

**INDUSTRIAL APPLICATIONS**  
 Unit in mm



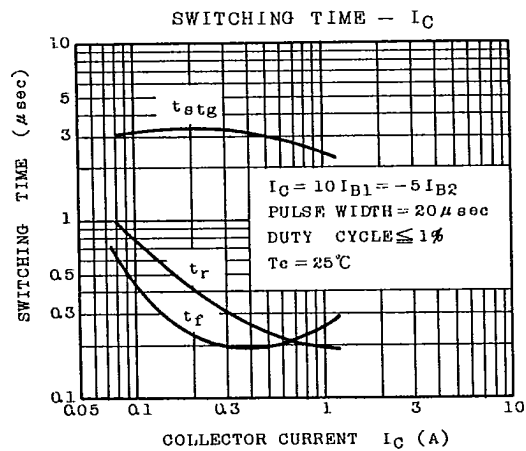
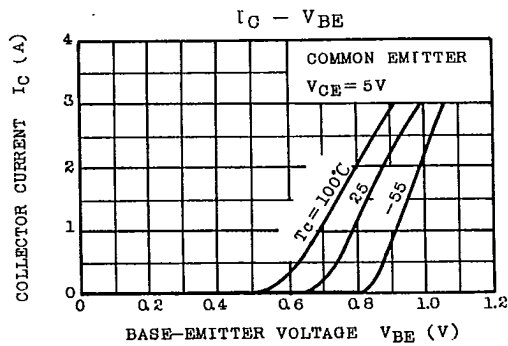
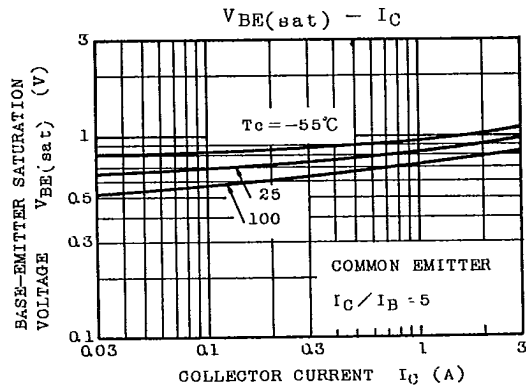
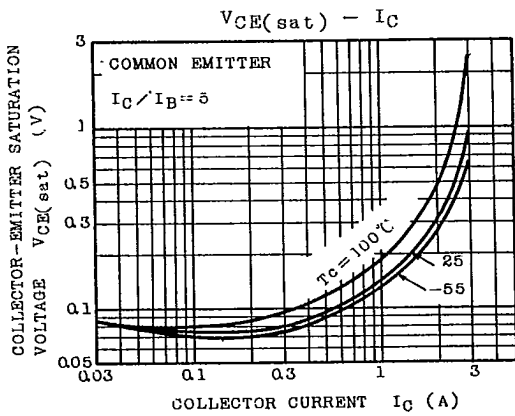
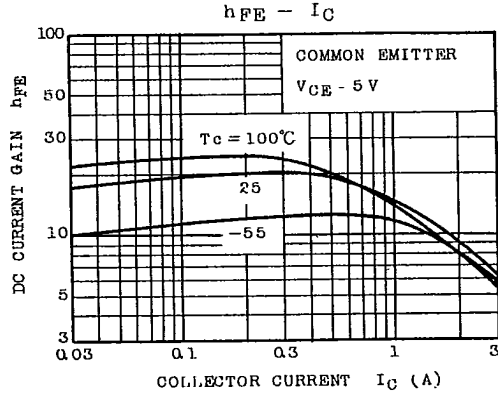
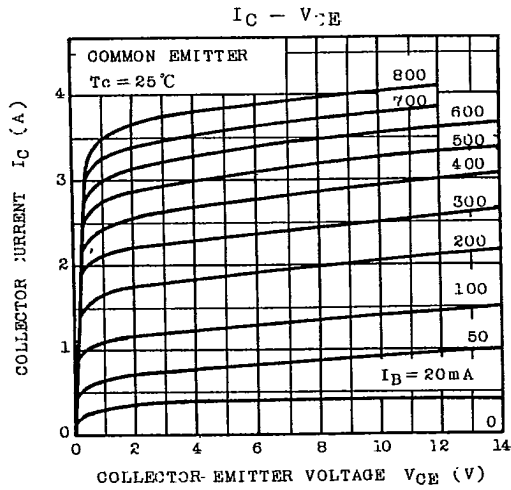
Weight : 1.9g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=800V, I_E=0$	-	-	100	$\mu A$
Emmitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	1	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	900	-	-	V
Collector-Emmitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	800	-	-	V
DC Current Gain (Note)	$h_{FE}$	$V_{CE}=5V, I_C=0.8A$	10	-	-	-
Collector-Emmitter Saturation Voltage (Note)	$V_{CE(sat)}$	$I_C=0.8A, I_B=0.16A$	-	-	0.6	V
Base-Emmitter Saturation Voltage (Note)	$V_{BE(sat)}$	$I_C=0.8A, I_B=0.16A$	-	-	1.2	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  $\leq 2\%$

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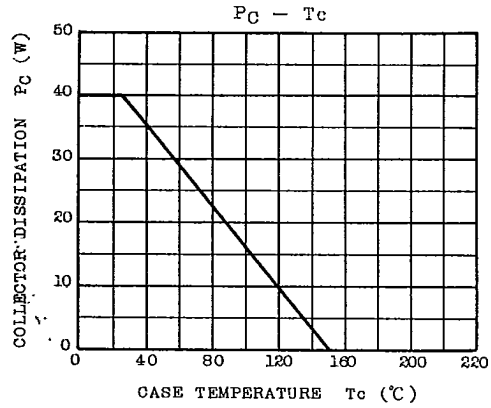
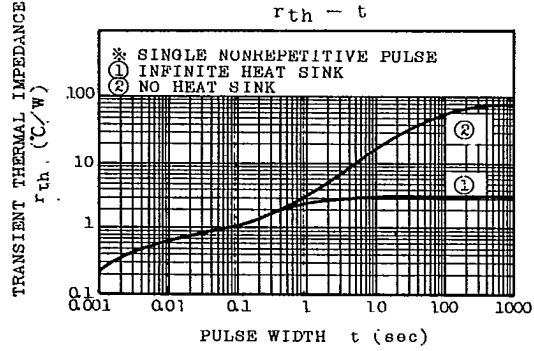
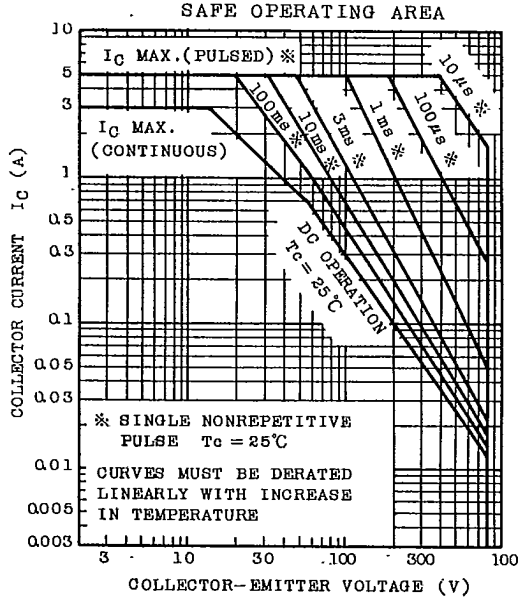


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