

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

# 2SC3376

SWITCHING REGULATOR AND HIGH VOLTAGE SWITCHING APPLICATIONS.

HIGH SPEED DC-DC CONVERTER APPLICATIONS.

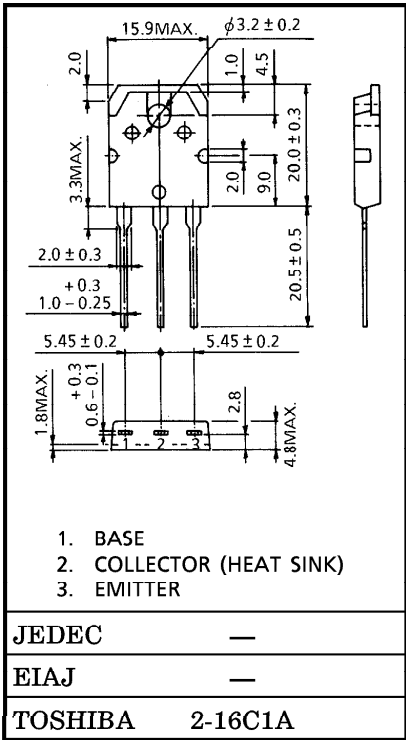
- Excellent Switching Times ( $I_C=0.8A$ )  
:  $t_r=1.0\mu s$  (Max.),  $t_f=1.0\mu s$  (Max.)
- High Collector-Emitter Breakdown Voltage :  $V_{CEO}=800V$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	900	V
Collector-Emitter Voltage	$V_{CEO}$	800	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector Current	DC	$I_C$	A
	Pulse	$I_{CP}$	
Base Current	$I_B$	1	A
Collector Power Dissipation ( $T_c = 25^\circ C$ )	$P_C$	60	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	$-55 \sim 150$	$^\circ C$

INDUSTRIAL APPLICATIONS

Unit in mm



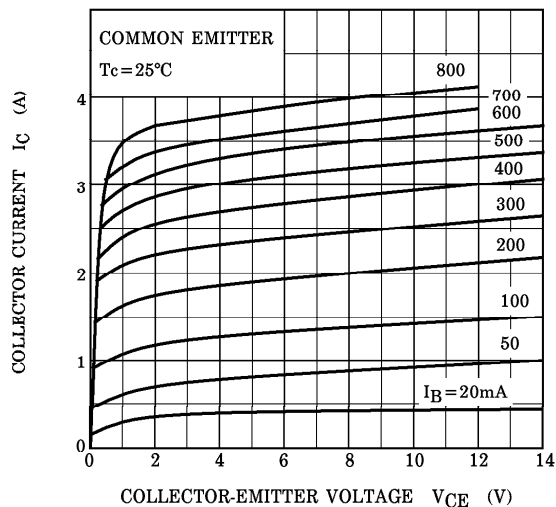
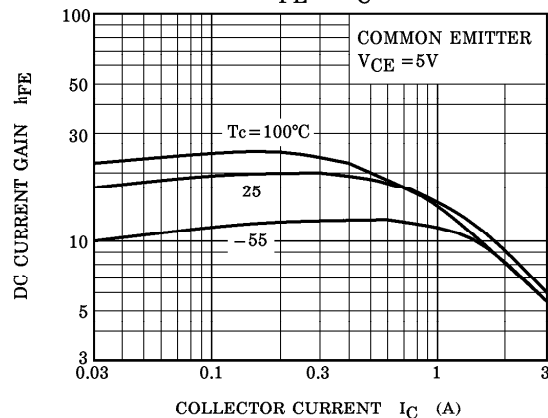
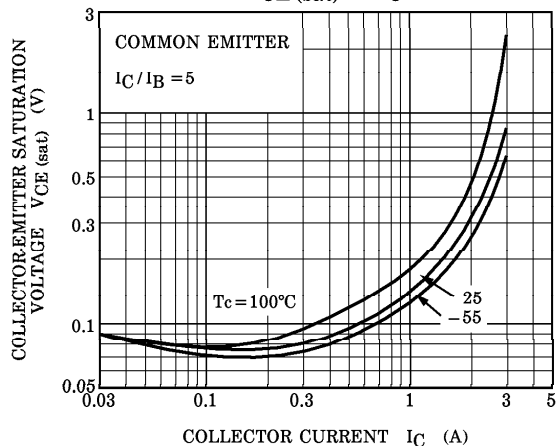
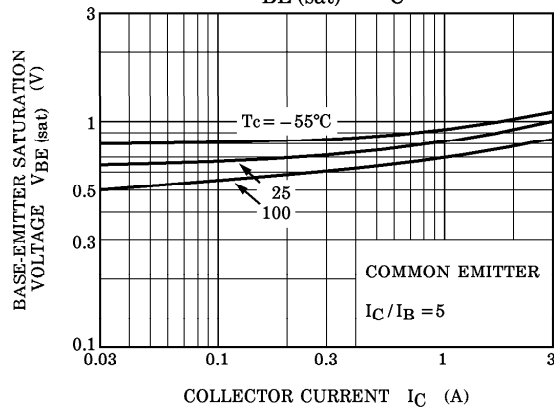
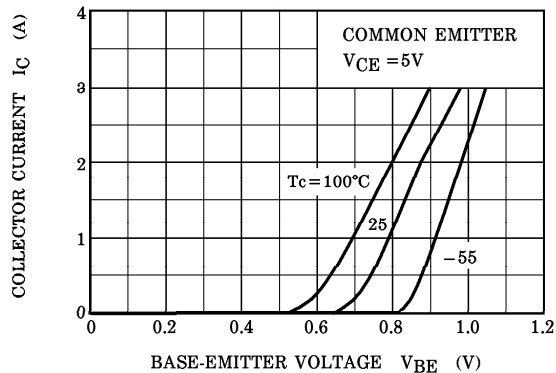
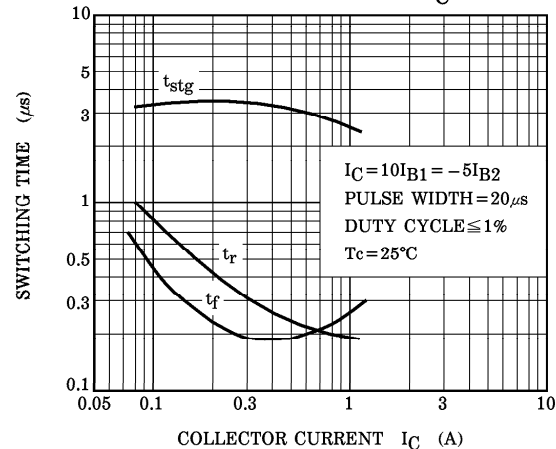
Weight : 4.7g

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	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	—	—	1	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	900	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	800	—	—	V
DC Current Gain	$h_{FE}$	$V_{CE}=5A, I_C=0.8A$	10	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.8A, I_B=0.16A$	—	—	0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=0.8A, I_B=0.16A$	—	—	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	

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$I_C - V_{CE}$  $h_{FE} - I_C$  $V_{CE(sat)} - I_C$  $V_{BE(sat)} - I_C$  $I_C - V_{BE}$ SWITCHING TIME -  $I_C$ 

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