

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

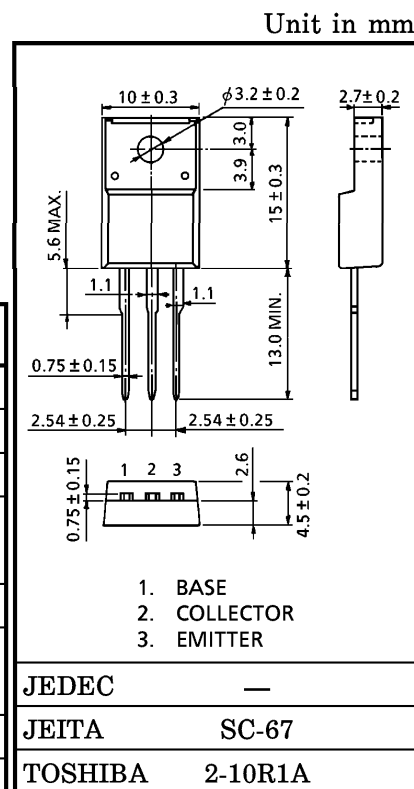
2SD2352

POWER AMPLIFIER APPLICATIONS

- High DC Current Gain : $h_{FE}=800\sim3200$
- Low Collector Saturation Voltage : $V_{CE(sat)}=0.3V$ (Typ.)

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

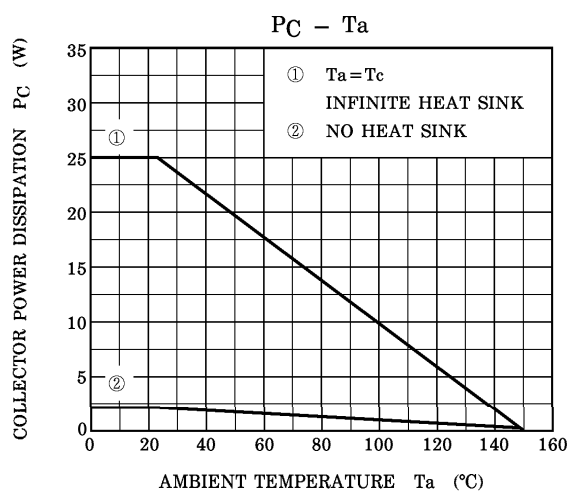
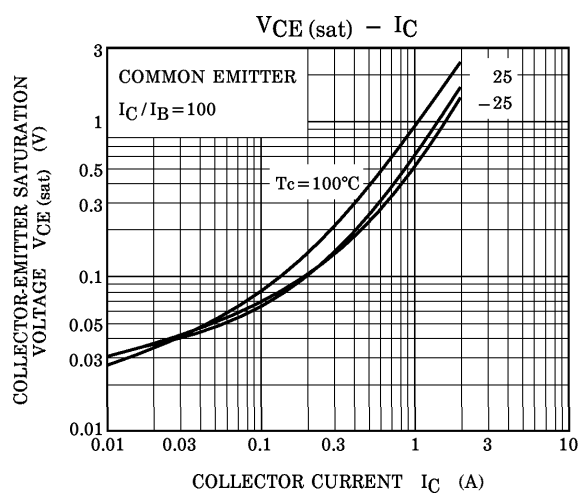
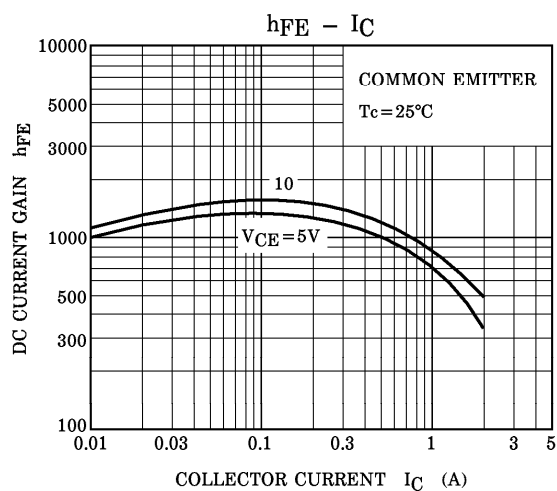
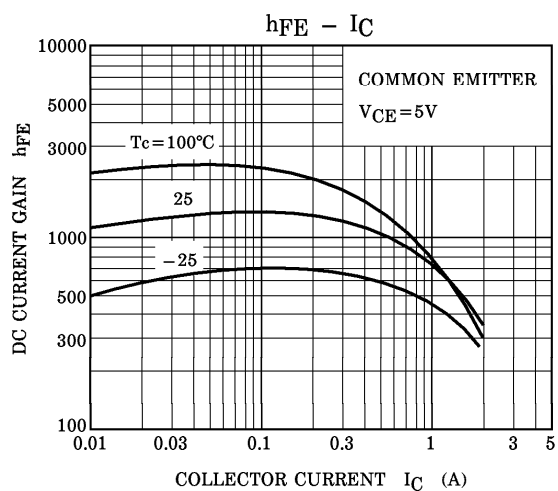
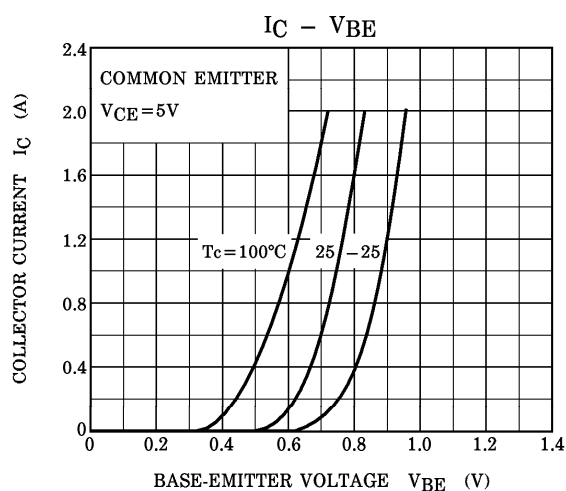
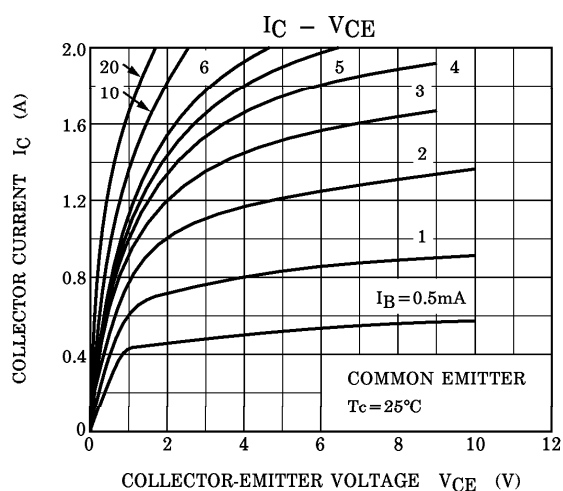
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	60	V
Collector-Emitter Voltage		V_{CEO}	60	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	I_C	2	A
	Pulse	I_{CP}	4	
Base Current		I_B	0.4	A
Collector Power Dissipation	$T_a = 25^\circ C$	P_C	2	W
	$T_c = 25^\circ C$		25	
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	$-55\sim150$	$^\circ C$

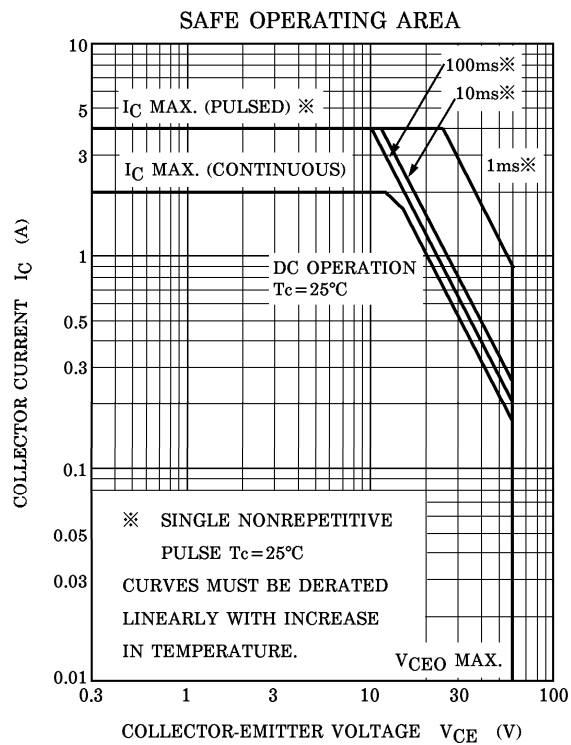
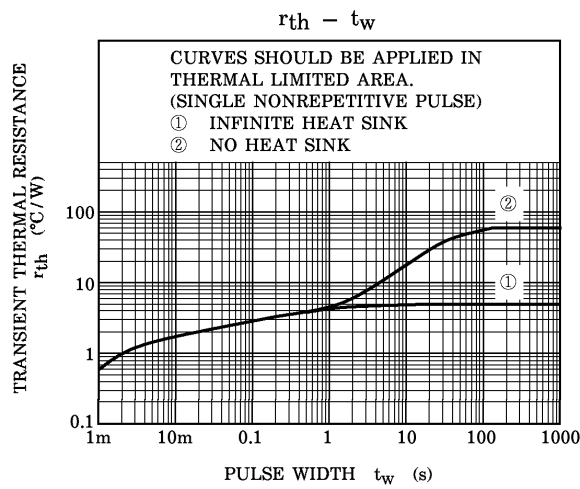


Weight : 1.7g (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=60V, I_E=0$	—	—	100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V, I_C=0$	—	—	100	μA
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C=50mA, I_B=0$	60	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=0.1A$	800	—	3200	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=1A$	350	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.5A, I_B=5mA$	—	0.3	1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=0.5A$	—	0.7	1.0	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=0.5A$	—	17	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	—	30	—	pF





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