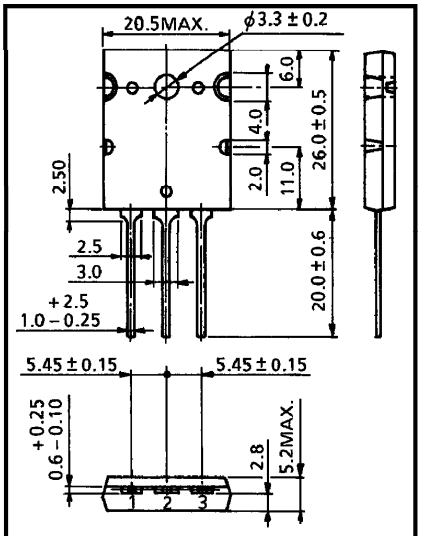
TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2SA1943

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5200
- Recommended for 100 W High Fidelity Audio Frequency Amplifier Output Stage.

Unit in mm



1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

JEDEC	—
EIAJ	—
TOSHIBA	2-21F1A

Weight : 9.75 g (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	−230	V
Collector-Emitter Voltage	V_{CEO}	−230	V
Emitter-Base Voltage	V_{EBO}	−5	V
Collector Current	I_C	−15	A
Base Current	I_B	−1.5	A
Collector Power Dissipation (Tc = 25°C)	P_C	150	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = −230 V, I_E = 0	—	—	−5.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = −5 V, I_C = 0	—	—	−5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = −50 mA, I_B = 0	−230	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE} = −5 V, I_C = −1 A	55	—	160	
	$h_{FE(2)}$	V_{CE} = −5 V, I_C = −7 A	35	60	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = −8 A, I_B = −0.8 A	—	−1.5	−3.0	V
Base-Emitter Voltage	V_{BE}	V_{CE} = −5 V, I_C = −7 A	—	−1.0	−1.5	V
Transition Frequency	f_T	V_{CE} = −5 V, I_C = −1 A	—	30	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = −10 V, I_E = 0, f = 1 MHz	—	360	—	pF

(Note) : $h_{FE(1)}$ Classification R : 55~110, O : 80~160

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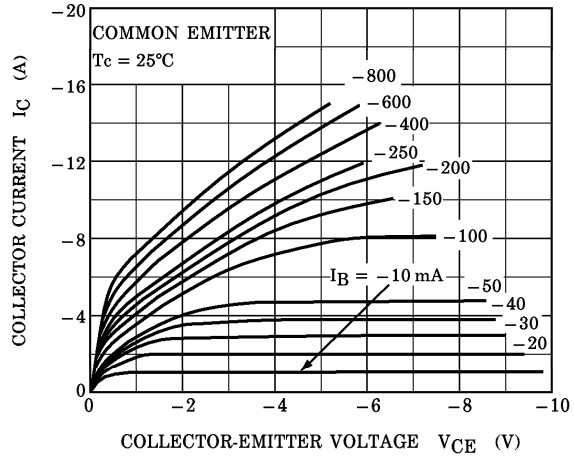
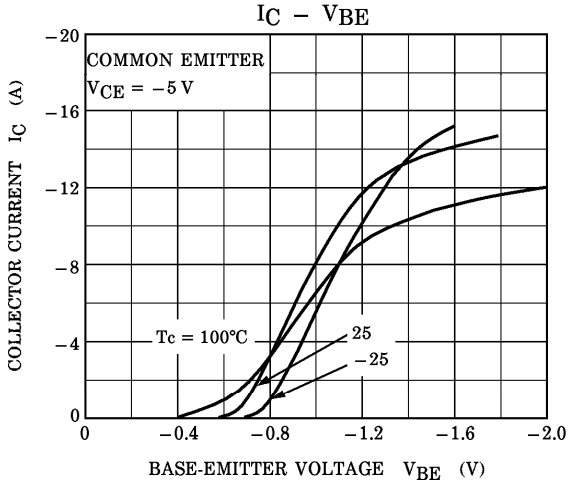
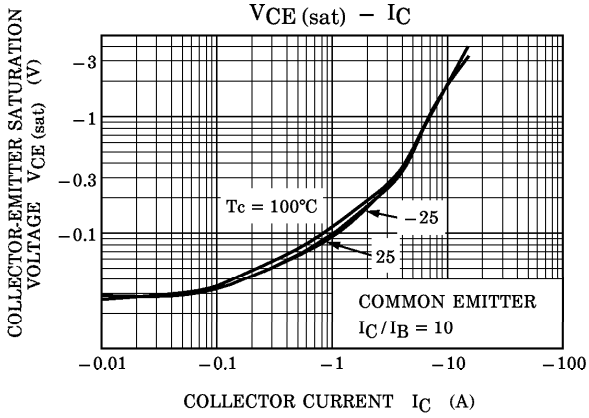
$I_C - V_{CE}$



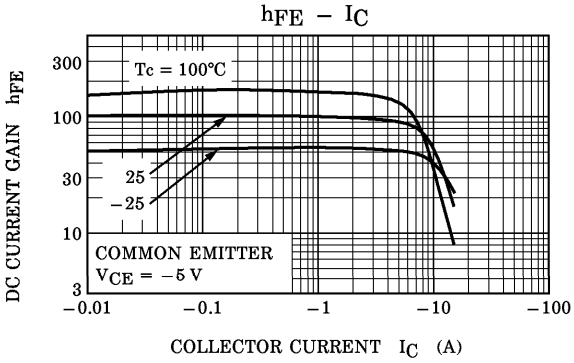
$I_C - V_{BE}$



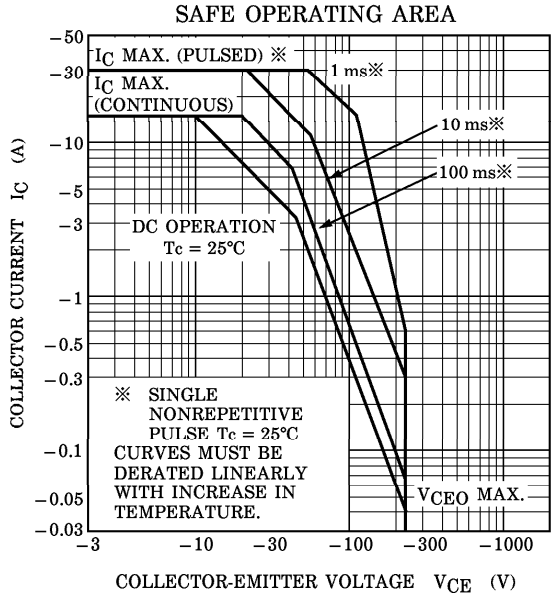
$V_{CE\,(sat)} - I_C$



$h_{FE} - I_C$



SAFE OPERATING AREA



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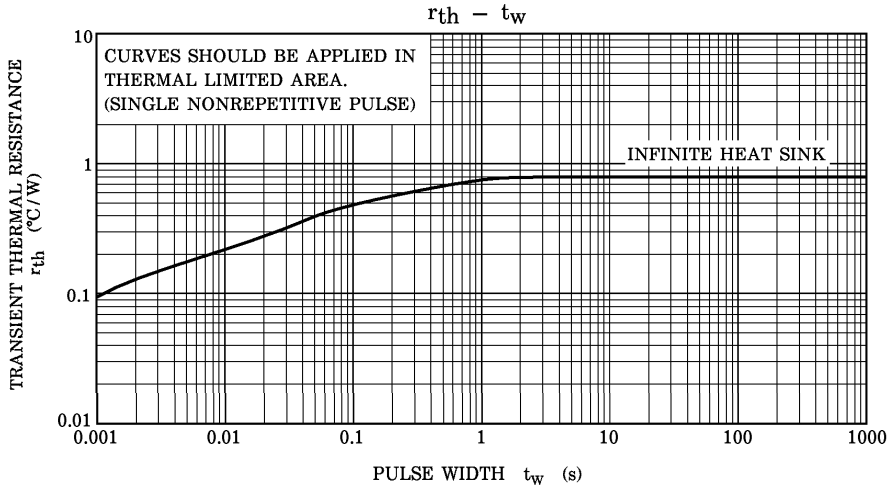
r_{th} – t_w
CURVES SHOULD BE APPLIED IN
THERMAL LIMITED AREA.
(SINGLE NONREPETITIVE PULSE)
INFINITE HEAT SINK
TRANSIENT THERMAL RESISTANCE
r_{th} (°C/W)
10
1
0.1
0.01
0.001
0.01
0.1
1
10
100
1000
PULSE WIDTH t_w (s)

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Üreticileri görün

Toplu alım ve teklif

Listede olmayan ya da yüksek adetli parçalar için teklif isteyin.

Teklif isteyin

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