

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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TOSHIBA 2SA1943

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2 S A 1 9 4 3

POWER AMPLIFIER APPLICATIONS

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

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	$I_{\mathbf{C}}$	-15	A	
Base Current	$I_{\mathbf{B}}$	-1.5	A	
Collector Power Dissipation (Tc = 25°C)	PC	150	w	
Junction Temperature	T_{j}	150	$^{\circ}\mathrm{C}$	
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C	

Unit in mm $\phi 3.3 \pm 0.2$ 20.5MAX 20.0 ± 0.6 3.0 5.45 ± 0.15 90 BASE COLLECTOR (HEAT SINK) **EMITTER JEDEC** EIAJ **TOSHIBA** 2-21F1A

Weight: 9.75 g (Typ.)

ELECTRICAL CHARACTERISTICS	$(Ta = 25^{\circ}C)$
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CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -230 \text{ V}, I_{E} = 0$	_	_	-5.0	μ A
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5 V, I_{C} = 0$	_	_	-5.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C} = -50 { m mA}, I_{ m B} = 0$	-230	_	_	V
DC Current Gain	hFE (1) (Note)	$V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$	55	1	160	
	h _{FE (2)}	$V_{CE} = -5 V, I_{C} = -7 A$	35	60	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C} = -8{\rm A},\ I_{\rm B} = -0.8{\rm A}$		-1.5	-3.0	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -5 V, I_{C} = -7 A$	_	-1.0	-1.5	V
Transition Frequency	$ m 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

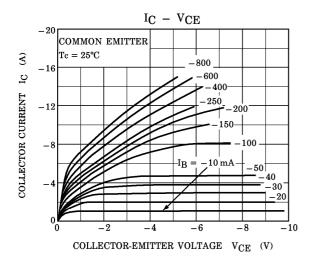
(Note): hFE(1) Classification R: 55~110, O: 80~160

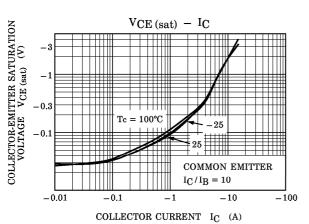
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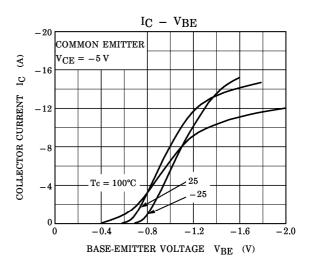
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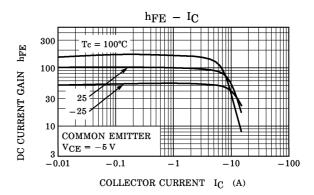
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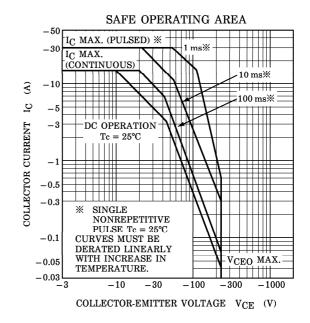
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