TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

2 S B 1 0 1 6 A

POWER AMPLIFIER APPLICATIONS

High Breakdown Voltage : V_{CEO} = −100V

• Low Collector-Emitter Saturation Voltage

: $V_{CE (sat)} = -2.0V (Max.)$

• Complementary to 2SD1407A

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	-100	V
Collector-Emitter Voltage	v_{CEO}	-100	V
Emitter-Base Voltage	$V_{ m EBO}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-5	A
Base Current	$I_{\mathbf{B}}$	-0.5	A
Collector Power Dissipation (Tc=25°C)	PC	30	w
Junction Temperature	T_{j}	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

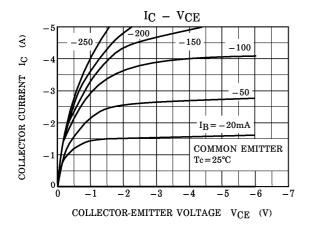
Weight: 1.7g (Typ.)

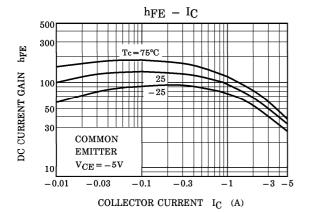
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

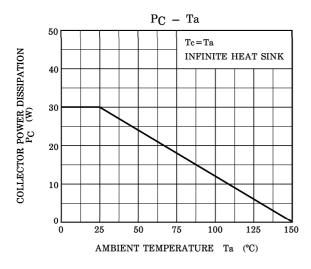
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -100V, I_{E} = 0$	<u> </u>	_	-100	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -5V$, $I_C = 0$	_	_	-1	mA
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{C} = -50 \text{mA}, I_{B} = 0$	-100	_	_	V
DC Current Gain	hFE (1) (Note)	$V_{CE} = -5V, I_{C} = -1A$	70	_	240	
	h _{FE} (2)	$V_{CE} = -5V, I_{C} = -4A$	20	_	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_C = -4A, I_B = -0.4A$	_	_	-2.0	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -5V, I_{C} = -4A$	_	_	-1.5	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -5V, I_{C} = -1A$	_	5	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_{E} = 0, f = 1MHz$	_	270	_	pF

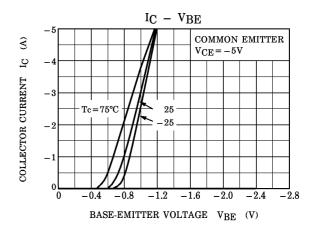
(Note) : $h_{FE(1)}$ Classification O : $70\sim140$, Y : $120\sim240$

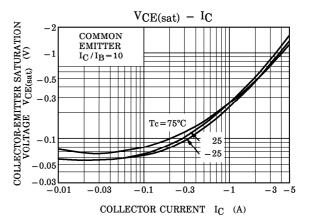
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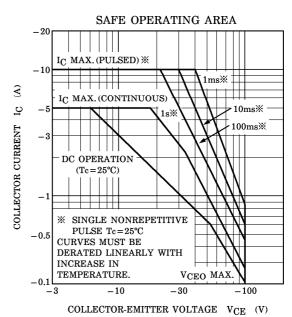












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