Unit in mm

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE

2 S C 4 7 0 7

LOW FREQUENCY AMPLIFIER APPLICATIONS.

DRIVER STAGE AMPLIFIER APPLICATIONS.

SWITCHING APPLICATIONS.

- Excellent hFE Linearity
 - : $h_{FE(2)} = 35$ (Min.), $(V_{CE} = 2V, I_C = 300 \text{mA})$
- Complementary to 2SA1811

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	35	V
Collector-Emitter Voltage	v_{CEO}	30	V
Emitter-Base Voltage	v_{EBO}	5	V
Collector Current	$I_{\mathbf{C}}$	500	mA
Base Current	$I_{\mathbf{B}}$	100	mA
Collector Power Dissipation	$P_{\mathbf{C}}$	800	mW
Junction Temperature	T_{j}	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

1. EMITTER 2. COLLECTOR 3. BASE JEDEC TO-92MOD EIAJ —

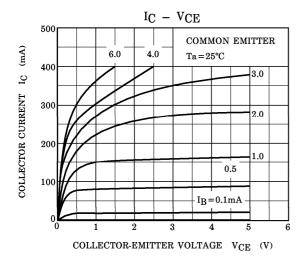
TOSHIBA 2-5J1A

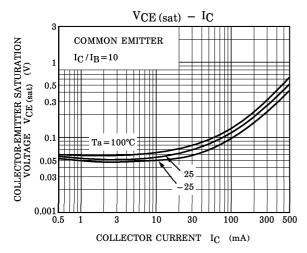
Weight: 0.36g

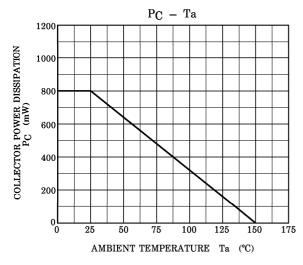
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

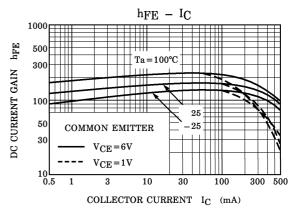
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{ m CBO}$	$V_{CB} = 35V, I_{E} = 0$			0.1	μ A
Emitter Cut-off Current	${ m I}_{ m EBO}$	$V_{EB}=5V, I_{C}=0$	_	_	0.1	μ A
DC Current Gain	h _{FE (1)}	$V_{\rm CE}$ =2V, $I_{\rm C}$ =100mA	100	_	300	
	$_{ m h_{FE}(2)}$	$V_{\rm CE}$ =2V, $I_{\rm C}$ =300mA	35	_	_	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	I _C =300mA, I _B =30mA	_	0.2	0.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{\rm CE}$ =2V, $I_{\rm C}$ =100mA	_	0.8	1.0	V
Transition Frequency	$ m f_T$	$V_{CE}=6V, I_{C}=20mA$	_	300	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 6V, I_{E} = 0, f = 1MHz$	_	7	_	pF

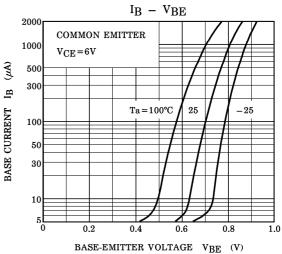
1 2001-05-24

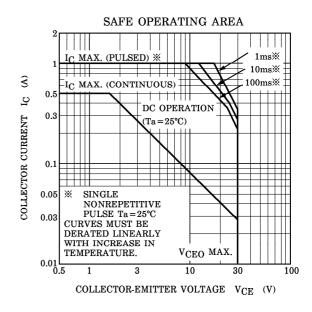












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