TOSHIBA 2SA1357

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

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STROBE FLASH APPLICATIONS.
AUDIO POWER AMPLIFIER APPLICATIONS.

- MIN h_{FE} of 70 at -2V, -4A.
- -5A Rated Collector Current.
- MAX V_{CE(sat)} of -1.0V at -4A I_C.
- 10W at 25°C Case Temperature.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTE	SYMBOL	RATING	UNIT			
Collector-Base Voltage		v_{CBO}	-35	V		
Collector-Emitter Voltage		v_{CEO}	-20	V		
Emitter-Base Voltage	v_{EBO}	-8	V			
Collector Current	DC	$I_{\mathbf{C}}$	- 5	A		
	Pulsed (Note 1)	I_{CP}	-8	Α		
Base Current	$I_{\mathbf{B}}$	-1	Α			
Collector Power	Ta = 25°C	D	1.5	W		
Dissipation	$T_c = 25^{\circ}C$	$^{\mathrm{P}_{\mathrm{C}}}$	10	W		
Junction Temperature		T_{j}	150	°C		
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C		

1. EMITTER
2. COLLECTOR
3. BASE

JEDEC —

EIAJ —

TOSHIBA 2-8H1A

Unit in mm

Weight: 0.82g

Note 1 : Pulse Test : Pulse Width = 10ms (Max.) Duty Cycle = 30% (Max.)

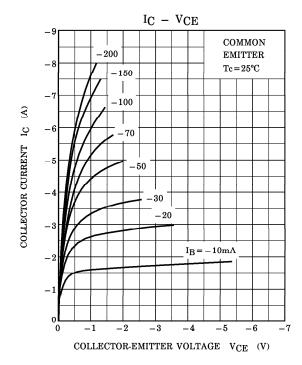
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

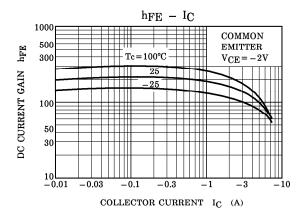
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{ m CBO}$	$V_{CB} = -35V, I_{E} = 0$		_	-100	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -8V, I_{C} = 0$	_	_	-100	μ A
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	$I_{C} = -10 \text{mA}, I_{B} = 0$	-20	_	_	V
DC Current Gain	hFE(1) (Note 2)	$V_{CE} = -2V, I_{C} = -0.5A$	100	_	320	
	$h_{\mathrm{FE}(2)}$	$V_{CE} = -2V$, $I_{C} = -4A$	70		_	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	$I_{\rm C} = -4$ A, $I_{\rm B} = -0.1$ A	-	_	-1.0	V
Base-Emitter Voltage	$ m v_{BE}$	$V_{CE} = -2V, I_{C} = -4A$	_	_	-1.5	V
Transition Frequency	$\mathbf{f_{T}}$	$V_{CE} = -2V, I_{C} = -0.5A$		170		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_{E} = 0, f = 1MHz$	_	62	_	pF

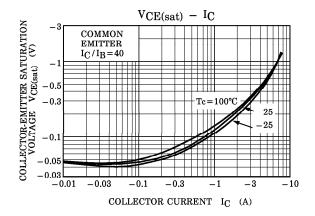
Note : $h_{FE(1)}$ Classification O : 100~200, Y : 160~320

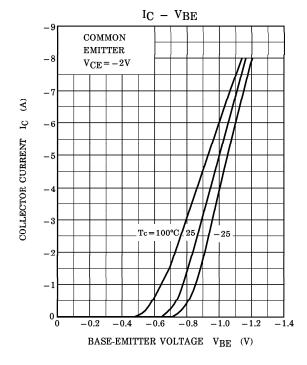
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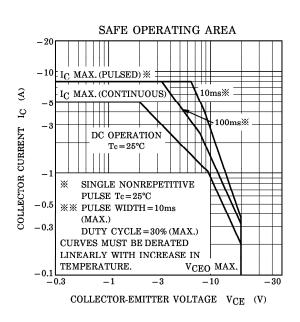
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