## TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

# 2SD2500

## HORIZONTAL DEFLECTION OUTPUT COLOR TV

Unit: mm

• Collector Metal (Fin) is Fully Covered with Mold Resin.

# **MAXIMUM RATINGS (Tc = 25°C)**

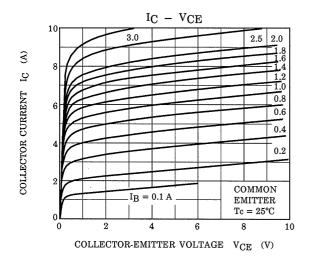
CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		$V_{CBO}$	1500	V	
Collector-Emitter Voltage		V <sub>CEO</sub>	600	V	
Emitter-Base Voltage		V <sub>EBO</sub>	5	V	
Collector Current	DC	IC	10	Α	
	Pulse	I <sub>CP</sub>	20		
Base-Current		Ι <sub>Β</sub>	5	Α	
Collector Power Dissipation		PC	50	W	
Junction Temperature		Tj	150	°C	
Storage Temperature Range		T <sub>stg</sub>	-55~150	°C	

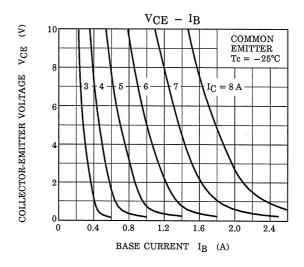
# 15.5±0.5 Ø3.6±0.3 3.0±

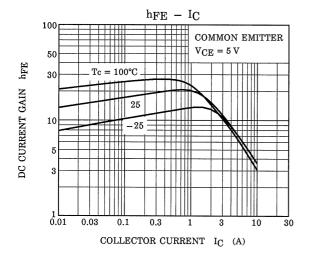
Weight: 5.5 g (typ.)

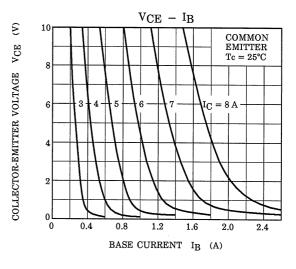
# **ELECTRICAL CHARACTERISTICS (Tc = 25°C)**

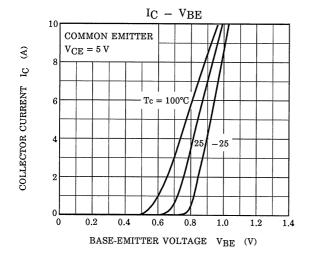
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Collector Cut-off Current		I <sub>CBO</sub>	V <sub>CB</sub> = 1500 V, I <sub>E</sub> = 0	_	_	1	mA
Emitter Cut-off Current		I <sub>EBO</sub>	V <sub>EB</sub> = 5 V, I <sub>C</sub> = 0	_	_	10	μΑ
Collector-Emitter Breakdown Voltage		V (BR) CEO	I <sub>C</sub> = 10 mA, I <sub>B</sub> = 0	600	_	_	V
DC Current Gain		h <sub>FE (1)</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 1 A	10	_	30	_
		h <sub>FE (2)</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 6	4	_	8	
Collector-Emitter Saturation Voltage		V <sub>CE (sat)</sub>	I <sub>C</sub> = 6A I <sub>B</sub> = 1.5A	_	_	3	>
Base-Emitter Saturation Voltage		V <sub>BE (sat)</sub>	I <sub>C</sub> = 6A I <sub>B</sub> = 1.5A	_	1.0	1.4	V
Transition Frequency		f <sub>T</sub>	V <sub>CE</sub> = 10 V, I <sub>C</sub> = 0.1 A	_	1.7	_	MHz
Collector Output Capacitance		C <sub>ob</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1 MHz	_	135	_	pF
Switching Time	Storage Time	t <sub>stg</sub>	I <sub>CP</sub> = 6A, I <sub>B1</sub> (end) = 1.5A f <sub>H</sub> = 15.75kHz	_	7	11	μs
	Fall Time	t <sub>f</sub>		_	0.35	0.7	

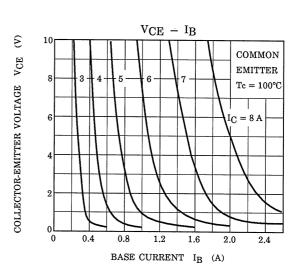




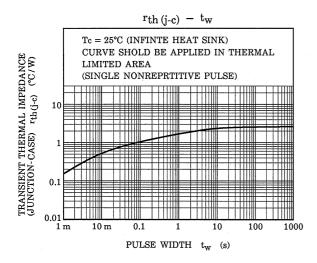


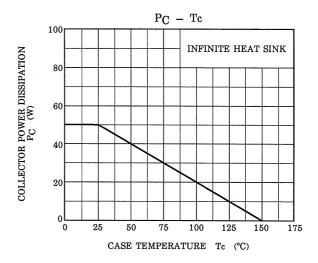


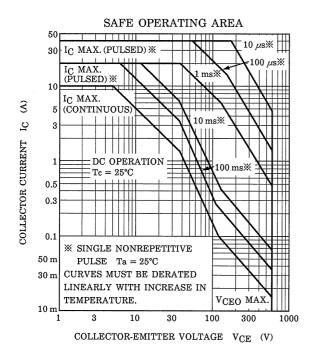




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