TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED MESA TYPE

2SD2539

HORIZONTAL DEFLECTION OUTPUT FOR COLOR TV

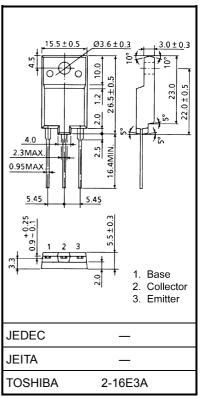
Unit: mm

Bult-in Damper Type

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

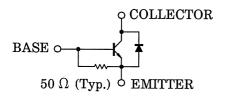
MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		V_{CBO}	1500	V	
Collector-Emitter Voltage		V _{CEO}	600	V	
Emitter-Base Voltage		V _{EBO}	5	V	
Collector Current	DC	Ic	7	A	
	Pulse	I _{CP}	14		
Base Current		Ι _Β	3.5	Α	
Collector Power Dissipation		PC	50	W	
Junction Temperature		Tj	150	°C	
Storage Temperature Range		T _{stg}	-55~150	°C	



Weight: 5.5 g (typ.)

EQUIVALENT CIRCUIT

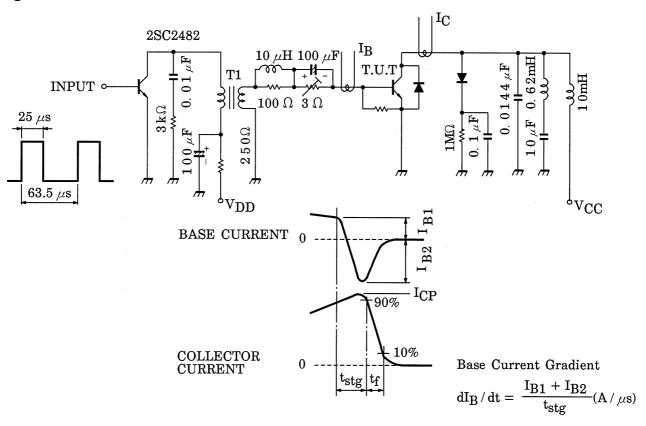


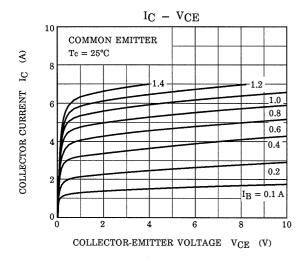
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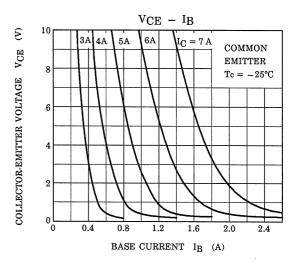
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

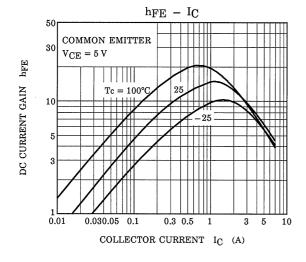
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Collector Cut-off Current		I _{CBO}	V _{CB} = 1500 V, I _E = 0	_	_	1	mA
Emitter Cut-off Current		I _{EBO}	V _{EB} = 5 V, I _C = 0	66	_	200	mA
Emitter-Base Breakdown Voltage		V _{(BR) EBO}	I _C = 400 mA, I _B = 0	5	_	_	٧
DC Current Gain		h _{FE (1)}	V _{CE} = 5 V, I _C = 1 A	8	_	28	_
		h _{FE (2)}	V _{CE} = 5 V, I _C = 5A	5	_	9	
Collector-Emitter Saturation Voltage		V _{CE} (sat)	I _C = 5 A, I _B = 1.0 A	_	_	5	V
Base-Emitter Saturation Voltage		V _{BE (sat)}	I _C = 5 A, I _B = 1.0 A	_	1.0	1.3	V
Forward Voltage (Damper Diode)		V _F	I _F = 5 A	_	1.6	2.0	٧
Transition Frequency		f _T	V _{CE} = 10 V, I _C = 0.1 A	_	2	_	MHz
Collector Output Capacitance		C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	115	_	pF
Switching Time	Storage Time	t _{stg}	I _{CP} = 5 A, I _{B1} (end) = 1.0 A f _H = 15.75 kHz	_	6	9	μs
	Fall Time	t _f		_	0.3	0.6	

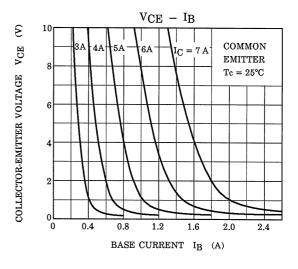
Fig.1 SWITCHING TIME TEST CIRCUIT

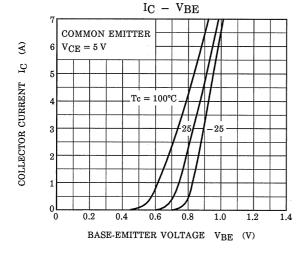


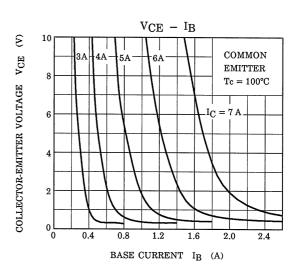


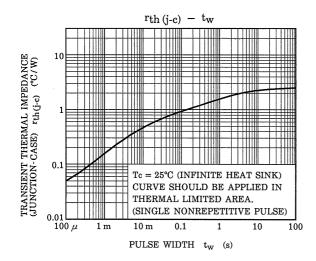


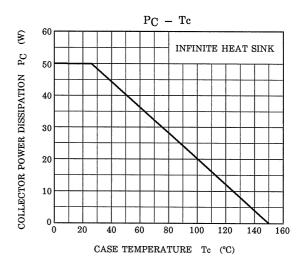


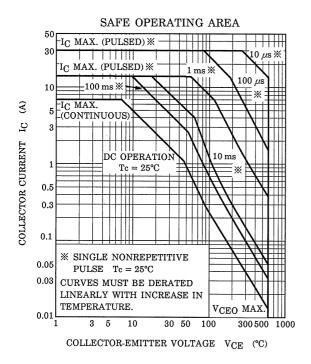












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