TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

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SWITCHING REGULATOR AND HIGH VOLTAGE SWITCHING APPLICATIONS.

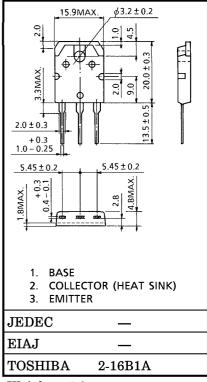
HIGH SPEED DC-DC CONVERTER APPLICATIONS.

- Excellent Switching Times (IC=0.5A) $t_r=1.0\mu s$ Max. $t_f=1.0\mu s$ Max.
- High Collector Breakdown Voltage: VCEO=800V

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		v_{CBO}	850	V
Collector-Emitter Voltage		v_{CEO}	800	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	$I_{\mathbf{C}}$	2	Α
	Pulse	I_{CP}	4	Α
Base Current		IB	1	Α
Collector Power Dissipation (Tc=25°C)		PC	80	w
Junction Temperature		T_{j}	150	°C
Storage Temperature Range		$T_{ m stg}$	-55~150	°C

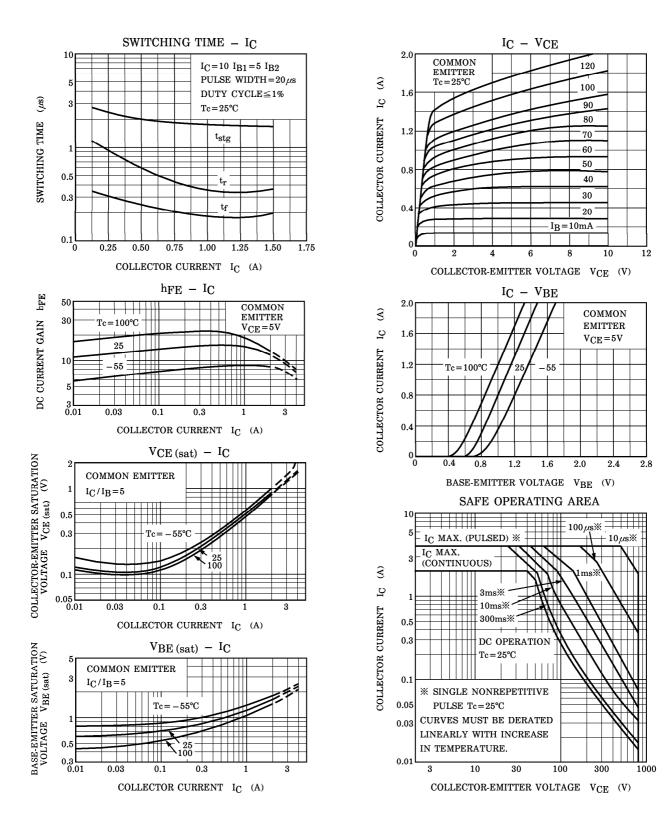
INDUSTRIAL APPLICATIONS Unit in mm



Weight: 4.6g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Collector Cut-off Current		ICBO	$V_{CB} = 800V, I_{E} = 0$	_	_	100	μ A		
Emitter Cut-off Current		I_{EBO}	$V_{EB}=7V, I_{C}=0$	_	_	1	mA		
Collector-Base Breakdown Voltage		V _(BR) CBO	$I_C=1mA$, $I_E=0$	850	_	_	V		
Collector-Emitter Breakdown Voltage		V (BR) CEO	$I_{\rm C} = 10 {\rm mA}, I_{\rm B} = 0$	800	_	_	v		
DC Current Gain		$h_{ extbf{FE}}$	$V_{CE} = 5V, I_{C} = 0.5A$	10		_			
Saturation Voltage	Collector-Emitter	V _{CE} (sat)	$I_C = 0.5A, I_B = 0.05A$	_	_	1.0	V		
	Base-Emitter	V _{BE} (sat)	$I_C = 0.5A, I_B = 0.05A$	_	_	1.5	V		
Switching Time	Rise Time	t _r	V _{CC} ≒400V ↑ ⊖ 20 µs	§ O	_	1.0			
	Storage Time	t_{stg}	IB1 INPUT IB1 OUT-PUT IB2 PUT	_	_	4.0	μs		
	Fall Time	t_f	$2I_{B1} = -I_{B2} = 0.1A,$ DUTY CYCLE $\leq 1\%$	_	_	1.0			



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