

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5279

SWITCHING REGULATOR APPLICATIONS

HIGH VOLTAGE SWITCHING APPLICATIONS

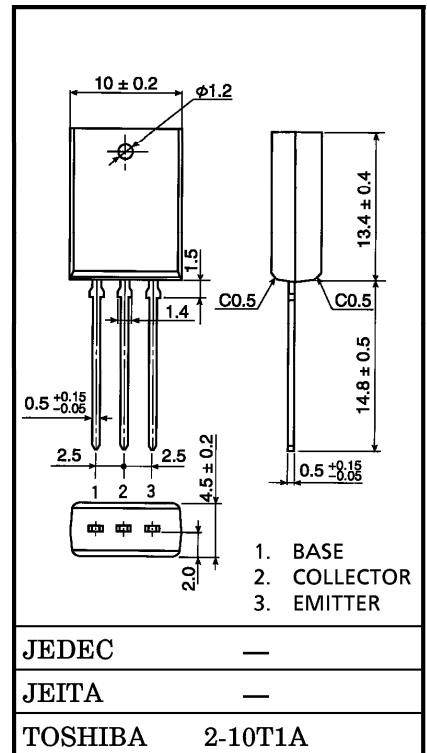
DC-DC CONVERTER APPLICATIONS

- Excellent Switching Times : $t_r = 1.0\mu s$ (Max.)
 $t_f = 1.0\mu s$ (Max.) ($I_C = 0.8A$)
- High Collectors Breakdown Voltage : $V_{CEO} = 400V$

MAXIMUM RATINGS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emmitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	2	A
Base Current	I_B	0.5	A
Collector Power Dissipation	P_C	1.8	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

Unit in mm



JEDEC	—
JEITA	—
TOSHIBA	2-10T1A

Weight : 1.5g (Typ.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICBO	V _{CB} = 500V, I _E = 0	—	—	100	μA
Emitter Cut-off Current		IEBO	V _{EB} = 7V, I _C = 0	—	—	1	mA
Collector-Base Breakdown Voltage		V _{(BR)CBO}	I _C = 1mA, I _B = 0	600	—	—	V
Collector-Emitter Breakdown Voltage		V _{(BR)CEO}	I _C = 10mA, I _B = 0	400	—	—	V
DC Current Gain		h _{FE}	V _{CE} = 5V, I _C = 0.1A	20	—	—	
			V _{CE} = 5V, I _C = 1A	8	—	—	
Collector-Emitter Saturation Voltage		V _{CE(sat)}	I _C = 1A, I _B = 0.2A	—	—	1.0	V
Base-Emitter Saturation Voltage		V _{BE(sat)}	I _C = 1A, I _B = 0.2A	—	—	1.5	V
Switching Time	Rise Time	t _r	<p>20 μs INPUT — IB₂ — OUTPUT IB₁ — IB₁ — 250 Ω V_{CC} = 200 V</p>	—	—	1.0	μs
	Storage Time	t _{stg}		—	—	2.5	
	Fall Time	t _f		I _{B1} = -I _{B2} = 0.08A DUTY CYCLE ≤ 1%	—	—	

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