

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5266A

SWITCHING REGULATOR APPLICATIONS

HIGH VOLTAGE SWITCHING APPLICATIONS

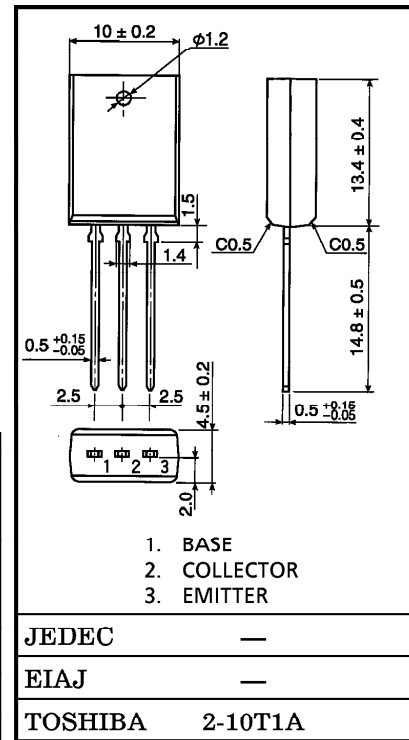
DC-DC CONVERTER APPLICATIONS

- Excellent Switching Times
: $t_r=0.5\mu s$ (Max.), $t_f=0.3\mu s$ (Max.)
- High Collector Breakdown Voltage : $V_{CEO}=400V$
- High DC Current Gain : $h_{FE}=20$ (Min.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	DC	I_C	5
	Pulse	I_{CP}	7
Base Current	I_B	2	A
Collector Power Dissipation	P_C	1.8	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Unit in mm



Weight : 1.5g (Typ.)

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = 500V, I_E = 0$	—	—	100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = 7V, I_C = 0$	—	—	100	nA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	$I_C = 1mA, I_E = 0$	600	—	—	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	400	—	—	V
DC Current Gain		$h_{FE} (1)$	$V_{CE} = 5V, I_C = 1mA$	13	—	—	
		$h_{FE} (2)$	$V_{CE} = 5V, I_C = 0.5A$	20	—	65	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = 2A, I_B = 0.25A$	—	—	1.0	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = 2A, I_B = 0.25A$	—	—	1.3	V
Switching Time	Turn-on Time	t_{on}	<p> $20\mu s$ INPUT I_{B1} OUTPUT I_{B1} I_{B2} $I_{B1} = 0.25A$ $I_{B2} = -0.5A$ DUTY CYCLE $\leq 1\%$ $V_{CC} = 200V$ </p>	—	—	0.5	μs
	Storage Time	t_{stg}		—	—	2.0	
	Fall Time	t_f		—	—	0.3	

