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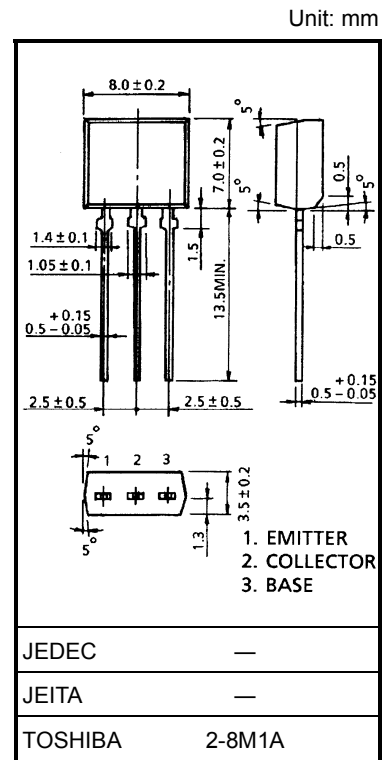
Switching Regulator and High-Voltage Switching Applications

DC-DC Converter Applications

- Excellent switching times: $t_r = 0.7 \mu s$ (max)
 $t_f = 0.5 \mu s$ (max), ($I_C = 0.3 A$)
- High breakdown voltage: $V_{CEO} = 800 V$
- High-speed DC-DC converter applications

Maximum Ratings ($T_a = 25^\circ C$)

Characteristics		Symbol	Rating	Unit
Collector-base voltage		V_{CBO}	900	V
Collector-emitter voltage		V_{CEO}	800	V
Emitter-base voltage		V_{EBO}	7	V
Collector current	DC	I_C	0.8	A
	Pulse	I_{CP}	1.5	
Base current		I_B	0.4	A
Collector power dissipation		P_C	1.3	W
Junction temperature		T_j	150	$^\circ C$
Storage temperature range		T_{stg}	-55 to 150	$^\circ C$

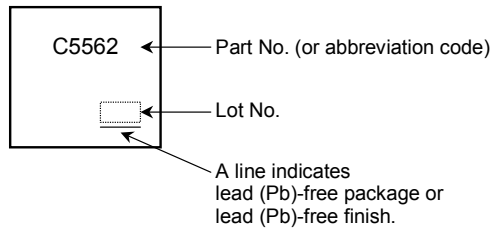


Weight: 0.55 g (typ.)

Electrical Characteristics ($T_a = 25^\circ C$)

Characteristics		Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current		I_{CBO}	$V_{CB} = 720 V, I_E = 0$	—	—	100	μA
Emitter cut-off current		I_{EBO}	$V_{EB} = 7 V, I_C = 0$	—	—	1	mA
Collector-base breakdown voltage		$V_{(BR)CBO}$	$I_C = 1 mA, I_E = 0$	900	—	—	V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	$I_C = 10 mA, I_B = 0$	800	—	—	V
DC current gain		$h_{FE(1)}$	$V_{CE} = 5 V, I_C = 1 mA$	10	—	—	—
		$h_{FE(2)}$	$V_{CE} = 5 V, I_C = 0.08 A$	15	—	60	
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = 0.3 A, I_B = 0.06 A$	—	—	1.0	V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C = 0.3 A, I_B = 0.06 A$	—	—	1.2	V
Switching time	Rise time	t_r	<p>$I_{B1} = 0.06 A, I_{B2} = -0.12 A,$ Duty cycle $\leq 1\%$</p>	—	—	0.7	μs
	Storage time	t_{stg}		—	—	4.5	
	Fall time	t_f		—	—	0.5	

Marking



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