

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE

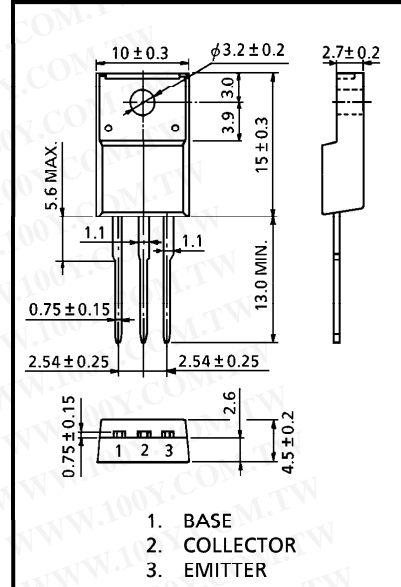
2SD2241

SWITCHING APPLICATIONS

- High DC Current Gain : $h_{FE}=2000$ (Min.)
- Low Saturation Voltage : $V_{CE(sat)}=1.5V$ (Max.)
- Complementary to 2SB1481

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Unit in mm



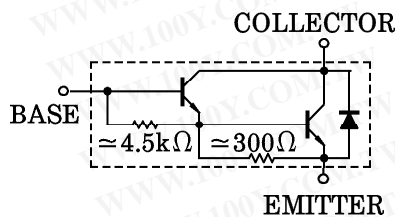
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	100	V
Collector-Emitter Voltage		V_{CEO}	100	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	±4	A
	Pulse	I_{CP}	±6	
Base Current		I_B	0.3	A
Collector Power Dissipation	Ta = 25°C	P_C	2.0	W
	Tc = 25°C		25	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C

JEDEC	—
EIAJ	SC-67
TOSHIBA	2-10R1A

Weight : 1.7g (Typ.)

EQUIVALENT CIRCUIT



961001EAA2

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● The information contained herein is subject to change without notice.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = 100V, I_E = 0$	—	—	20	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = 5V, I_C = 0$	—	—	2.5	mA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	100	—	—	V
DC Current Gain		$h_{FE(1)}$	$V_{CE} = 2V, I_C = 1.5A$	2000	—	—	
		$h_{FE(2)}$	$V_{CE} = 2V, I_C = 3A$	1000	—	—	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = 3A, I_B = 6mA$	—	—	1.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = 3A, I_B = 6mA$	—	—	2.0	V
Emitter-Collector Forward Voltage		V_{ECF}	$I_E = 1A, I_B = 0$	—	—	2.0	V
Switching Time	Turn-on Time	t_{on}	<p> $I_{B1} = -I_{B2} = 6mA,$ $DUTY\ CYCLE \leq 1\%$ </p>	—	0.2	—	μs
	Storage Time	t_{stg}		—	1.5	—	
	Fall Time	t_f		—	0.6	—	

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