

**TOSHIBA**

**2SD2526**

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

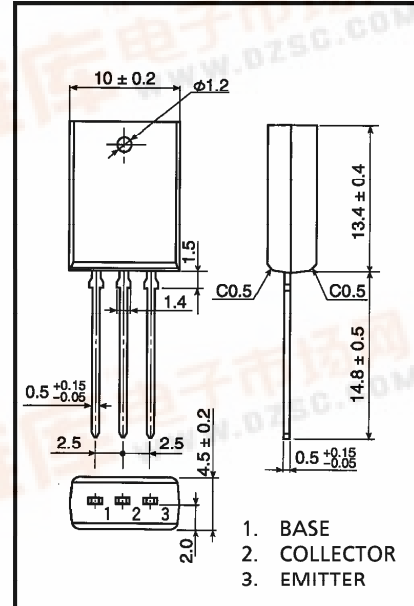
# 2SD2526

HIGH POWER SWITCHING APPLICATIONS

HAMMER DRIVE, PULSE MOTOR DRIVE APPLICATIONS

- High DC Current Gain :  $h_{FE} = 2000$  (Min.) ( $V_{CE} = 3V, I_C = 3A$ )
- Low Saturation Voltage :  $V_{CE(sat)} = 1.5V$  (Max.) ( $I_C = 3A$ )
- Complementary to 2SB1641

Unit in mm



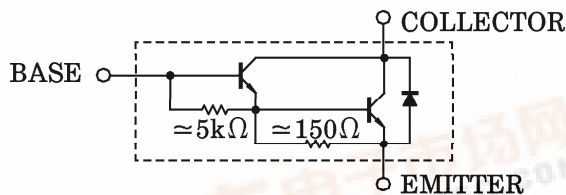
MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	100	V
Collector-Emitter Voltage		$V_{CEO}$	100	V
Emitter-Base Voltage		$V_{EBO}$	7	V
Collector Current	DC	$I_C$	5	A
	Pulse		8	
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	$^\circ C$

JEDEC	—
EIAJ	—
TOSHIBA	2-10T1A

Weight : 1.5g

EQUIVALENT CIRCUIT



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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB} = 100V, I_E = 0$	—	—	100	$\mu A$
Emitter Cut-off Current		$I_{EBO}$	$V_{EB} = 6V, I_C = 0$	—	—	2.5	mA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C = 30mA, I_B = 0$	100	—	—	V
DC Current Gain		$h_{FE(1)}$	$V_{CE} = 3V, I_C = 3A$	2000	—	15000	
		$h_{FE(2)}$	$V_{CE} = 3V, I_C = 5A$	1000	—	—	
Collector-Emitter Saturation Voltage		$V_{CE(sat)(1)}$	$I_C = 3A, I_B = 6mA$	—	1.1	1.5	V
		$V_{CE(sat)(2)}$	$I_C = 5A, I_B = 20mA$	—	1.3	2.5	
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = 3A, I_B = 6mA$	—	1.7	2.5	V
Switching Time	Turn-on Time	$t_{on}$	<p> <math>I_{B1} = -I_{B2} = 6mA</math>  <math>V_{CC} = 30V</math>  <math>DUTY\ CYCLE \leq 1\%</math> </p>	—	1.0	—	$\mu s$
	Storage Time	$t_{stg}$		—	4.0	—	
	Fall Time	$t_f$		—	2.5	—	

