

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

# 2SA1811

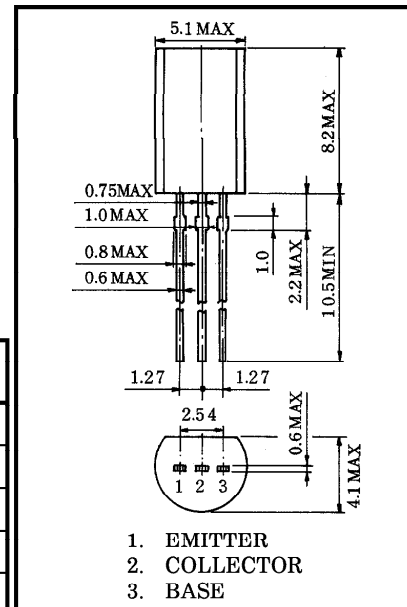
LOW FREQUENCY AMPLIFIER APPLICATIONS.  
 DRIVER STAGE AMPLIFIER APPLICATIONS.  
 SWITCHING APPLICATIONS.

Unit in mm

- Excellent  $h_{FE}$  Linearity  
 :  $h_{FE(2)} = 35$  (Min.), ( $V_{CE} = -2V$ ,  $I_C = -300mA$ )
- Complementary to 2SC4707

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-35	V
Collector-Emitter Voltage	$V_{CEO}$	-30	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-500	mA
Base Current	$I_B$	-100	mA
Collector Power Dissipation	$P_C$	800	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$



JEDEC	TO-92MOD
EIAJ	—
TOSHIBA	2-5J1A

Weight : 0.36g

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CB0}$	$V_{CB} = -35V$ , $I_E = 0$	—	—	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EB0}$	$V_{EB} = -5V$ , $I_C = 0$	—	—	-0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -2V$ , $I_C = -100mA$	100	—	300	
	$h_{FE(2)}$	$V_{CE} = -2V$ , $I_C = -300mA$	35	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -300mA$ , $I_B = -30mA$	—	-0.2	-0.5	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -2V$ , $I_C = -100mA$	—	-0.8	-1.0	V
Transition Frequency	$f_T$	$V_{CE} = -6V$ , $I_C = -20mA$	—	200	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -6V$ , $I_E = 0$ , $f = 1MHz$	—	9	—	pF

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