

TOSHIBA**2SC3324**

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC3324

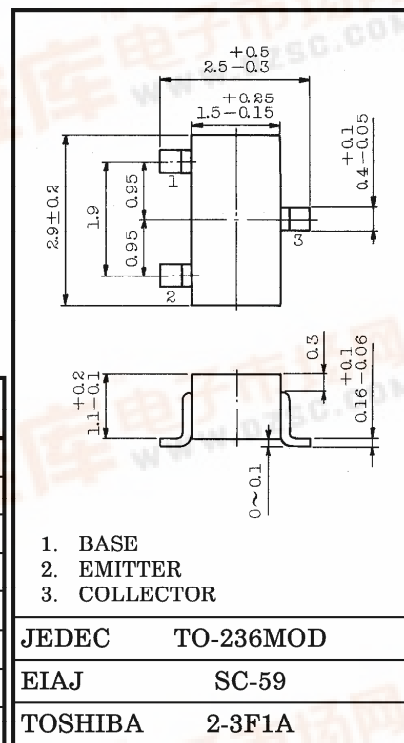
AUDIO FREQUENCY LOW NOISE AMPLIFIER APPLICATIONS.

Unit in mm

- High Voltage : $V_{CEO}=120V$
- Excellent h_{FE} Linearity
: $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95$ (Typ.)
- High h_{FE} : $h_{FE}=200\sim700$
- Low Noise : $NF(2)=0.2dB$ (Typ.), $3dB$ (Max.)
- Complementary to 2SA1312
- Small Package

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	120	V
Collector-Emitter Voltage	V_{CEO}	120	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Base Current	I_B	20	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	$-55\sim125$	$^\circ C$

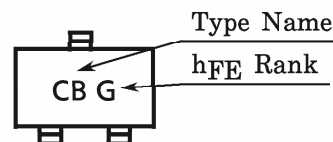
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

Weight : 0.012g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=120V, I_E=0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	—	—	0.1	μA
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=6V, I_C=2mA$	200	—	700	
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=10mA, I_B=1mA$	—	—	0.3	V
Transition Frequency	f_T	$V_{CE}=6V, I_C=1mA$	—	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	—	4	—	pF
Noise Figure	NF (1)	$V_{CE}=6V, I_C=0.1mA, f=100Hz, R_g=10k\Omega$	—	0.5	6	dB
	NF (2)	$V_{CB}=6V, I_C=0.1mA, f=1kHz, R_g=10k\Omega$	—	0.2	3	dB

Note: h_{FE} Classification GR(G): 200~400, BL(L): 350~700
() Marking Symbol

MARKING



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