

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE

# 2SC2383

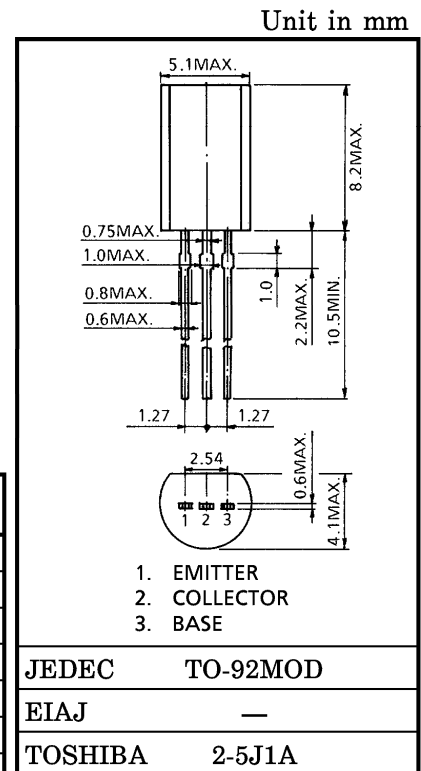
COLOR TV VERT. DEFLECTION OUTPUT APPLICATIONS

COLOR TV CLASS B SOUND OUTPUT APPLICATIONS

- High Voltage :  $V_{CEO} = 160\text{ V}$
- Large Continuous Collector Current Capability.
- Recommended for Vert. Deflection Output & Sound Output Applications for Line Operated TV.
- Complementary to 2SA1013

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	160	V
Collector-Emitter Voltage	$V_{CEO}$	160	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	1	A
Base Current	$I_B$	0.5	A
Collector Power Dissipation	$P_C$	900	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 150\text{ V}, I_E = 0$	—	—	1.0	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 6\text{ V}, I_C = 0$	—	—	1.0	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, I_B = 0$	160	—	—	V
DC Current Gain	$h_{FE}$ (Note)	$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	60	—	320	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{ mA}, I_B = 50\text{ mA}$	—	—	1.5	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = 5\text{ V}, I_C = 5\text{ mA}$	0.45	—	0.75	V
Transition Frequency	$f_T$	$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	20	100	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0,$ $f = 1\text{ MHz}$	—	—	20	pF

(Note) :  $h_{FE}$  Classification R : 60~120, O : 100~200, Y : 160~320

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