



2SC2383

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

COLOR TV AUDIO OUTPUT & COLOR TV VERTICAL OUTPUT

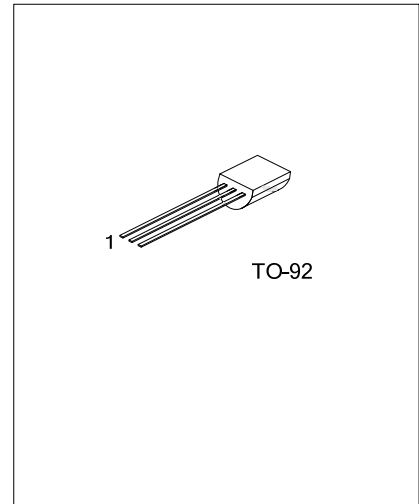
■ DESCRIPTION

The UTC **2SC2383** is an NPN epitaxial silicon transistor, it uses UTC's advanced technology to provide customers high DC current gain and high breakdown voltage.

The UTC **2SC2383** is usually used in Color TV Vertical Deflection Output and Audio Output.

■ FEATURES

- * High breakdown Voltage
- * High DC Current Gain



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC2383L-T92-B	2SC2383G-T92-B	TO-92	E	C	B	Tape Box

<p>2SC2383L-T92-B</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Halogen Free</p>	<p>(1) B: Tape Box</p> <p>(2) T92: TO-92</p> <p>(3) Halogen Free, L: Lead Free</p>
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■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	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	T_{STG}	-55 ~ 150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CE}=150\text{V}, I_E=0$			1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=6\text{V}, I_C=0$			1	μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=10\text{mA}, I_B=0$	160			V
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}, I_C=200\text{mA}$	60		320	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			1.5	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=5\text{V}, I_C=5\text{mA}$	0.45		0.75	V
Current Gain Bandwidth Product	f_T	$V_{CE}=5\text{V}, I_C=200\text{mA}$	20	100		MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			20	pF

■ h_{FE} CLASSIFICATION

CLASSIFICATION	R	O	Y
h_{FE}	60~120	100-200	160-320

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