

**UTC** UNISONIC TECHNOLOGIES CO., LTD

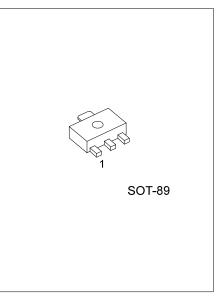
2SC3468

# NPN EPITAXIAL SILICON TRANSISTOR

# HIGH VOLTAGE TRANSISTOR FOR VIDEO OUTPUT OF **HIGH-DEFINITION CRT** DISPLAYS

#### **FEATURES**

- \* High breakdown voltage: V<sub>CBO</sub>, V<sub>CEO</sub> ≥ 300V
- \* Small reverse transfer capacitance and excellent high frequency characteristicF



#### ORDERING INFORMATION

Ordering Number	Dookago	Pin Assignment			Docking	
	Package	1	2	3	Packing	
2SC3468G-x-AB3-R	SOT-89	В	С	E	Tape Reel	
Note: Pin Assignment: B: Base C: Collector E: Emitter						
2SC3468G-x-AB3-R						
TTTT T──── (1)Packing Type	(1) R: Tape Reel					
(2)Package Type	(2) AB3: SOT-8	89				

(Z) ackage Type	(Z) AD3. 301-69
(3)Rank	(3) x: refer to Classification of $h_{FE}$
(4)Green Package	(4) G: Halogen Free and Lead Free

#### MARKING



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#### ■ ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-to-Base Voltage	V <sub>CBO</sub>	300	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>	300	V
Emitter-to-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	Ι <sub>C</sub>	100	mA
Collector Current (Pulse)	I <sub>CP</sub>	200	mA
Collector Dissipation	Pc	1.0	W
Junction Temperature	TJ	0 ~ +125	°C
Storage Temperature	T <sub>STG</sub>	-65 ~ +125	°C

Notes: 1. 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.

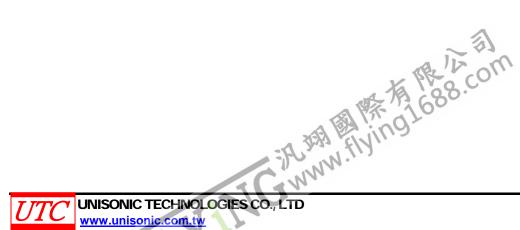
2. The device is guaranteed to meet performance specification within 0°C ~70°C operating temperature range and assured by design from –20°C ~85°C.

#### ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, unless otherwise specified)

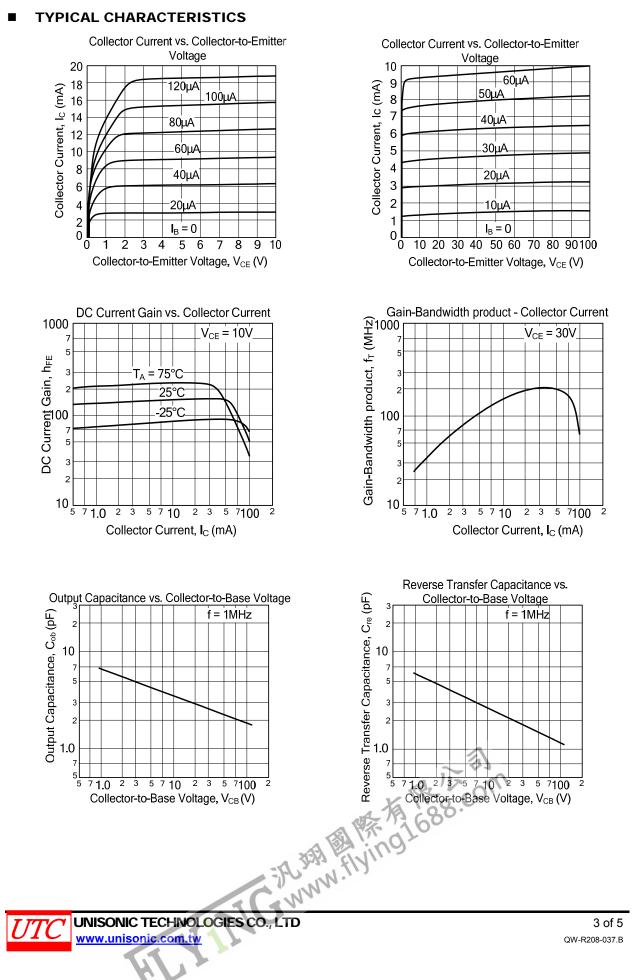
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> = 200V, I <sub>E</sub> = 0			0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	$V_{EB} = 4V, I_{C} = 0$			0.1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 10mA	40		320	
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = 30V, I <sub>C</sub> = 10mA		150		MHz
Collector-to-Emitter Saturation Voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = 20mA, I <sub>B</sub> = 2mA			0.6	V
Base-to-Emitter Saturation Voltage	V <sub>BE (sat)</sub>	I <sub>C</sub> = 20mA, I <sub>B</sub> = 2mA			1.0	V
Collector-to-Base Breakdown Voltage	V <sub>(BR)</sub> CBO	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	300			V
Collector-to-Emitter Breakdown Voltage	V <sub>(BR) CEO</sub>	I <sub>C</sub> = 1mA, R <sub>BE</sub> = ∞	300			V
Emitter-to-Base Breakdown Voltage	V <sub>(BR) EBO</sub>	I <sub>E</sub> = 10μΑ, I <sub>C</sub> = 0	5			V
Output Capacitance	Cob	V <sub>CB</sub> = 30V, f = 1MHz		2.6		pF
Reverse Transfer Capacitance	Cre	V <sub>CB</sub> = 30V, f = 1MHz		1.8		pF

#### CLASSIFICATION of h<sub>FE</sub>

RANK	С	D	E	F
RANGE	40 ~ 80	60 ~ 120	100 ~ 200	160 ~ 320

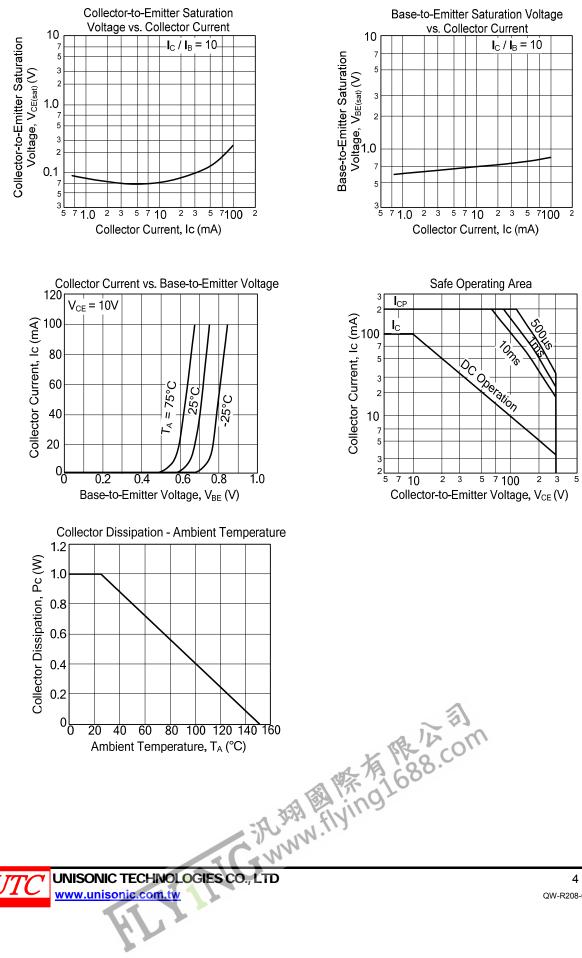


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#### **TYPICAL CHARACTERISTICS**



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