# onsemi

## RF T

### 10 V, 70 mA, $f_T$ = 7 GHz, NPN Single SSFP

### 2SC5488A

#### Features

- Low-noise: NF = 1.0 dB Typ (f = 1 GHz)
- High Gain:  $|S21e|^2 = 12 \text{ dB Typ} (f = 1 \text{ GHz})$
- High Cut–off Frequency:  $f_T = 7$  GHz Typ
- Ultrasmall, Slim Flat-lead Package (1.4 mm x 0.8 mm x 0.6 mm)
- This Device is Pb–Free and Halogen Free

#### Specifications

#### ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^{\circ}C$ )

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-to-Base Voltage	20	V
V <sub>CEO</sub>	Collector-to-Emitter Voltage	10	V
V <sub>EBO</sub>	Emitter-to-Base Voltage	2	V
Ι <sub>C</sub>	Collector Current	70	mA
P <sub>C</sub>	Collector Dissipation	100	mW
Tj	Junction Temperature	150	°C
Tstg	Storage Temperature	-55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.



SOT-623 / SSFP CASE 631AC

#### MARKING DIAGRAM



LN = Specific Device Code

#### ELECTRICAL CONNECTION



#### **ORDERING INFORMATION**

Device	Package	Shipping <sup>†</sup>
2SC5488A-TL-H	SOT–623 / SSFP (Pb–Free, Halide Free)	8000 / Tape & Reel

+For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, <u>BRD8011/D</u>.

Figure 1.  $h_{FE}$  –  $I_C$ 

V<sub>CB</sub>, COLLECTOR-TO-BASE VOLTAGE (V)

Figure 2.  $f_T - I_C$ 

Cob,

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 $f_{T}$ , GAIN–BANDWIDTH PRODUCT (GHz)



Unit: mm



Figure 8. Land Pattern Example

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