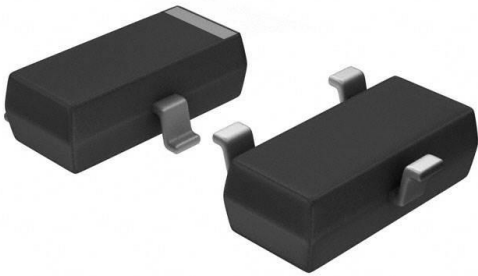


BCW61CMTF Datasheet

www.digi-electronics.com



| | |
|------------------------------|--|
| DiGi Electronics Part Number | BCW61CMTF-DG |
| Manufacturer | onsemi |
| Manufacturer Product Number | BCW61CMTF |
| Description | TRANS PNP 32V 0.1A SOT23-3 |
| Detailed Description | Bipolar (BJT) Transistor PNP 32 V 100 mA 350 mW S urface Mount SOT-23-3 |

<https://www.DiGi-Electronics.com>



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

BCW61CMTF

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

32 V

Current - Collector Cutoff (Max):

20nA

Power - Max:

350 mW

Operating Temperature:

-

Package / Case:

TO-236-3, SC-59, SOT-23-3

Base Product Number:

BCW61

Manufacturer:

onsemi

Product Status:

Obsolete

Current - Collector (Ic) (Max):

100 mA

Vce Saturation (Max) @ Ib, Ic:

550mV @ 1.25mA, 50mA

DC Current Gain (hFE) (Min) @ Ic, Vce:

250 @ 2mA, 5V

Frequency - Transition:

-

Mounting Type:

Surface Mount

Supplier Device Package:

SOT-23-3

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

REACH Status:

REACH Unaffected

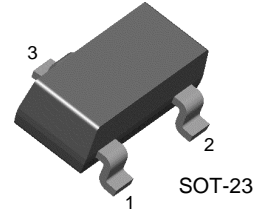
HTSUS:

8541.21.0095



BCW61A/B/C/D

General Purpose Transistor



1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|-----------|-----------------------------|-----------|------------------|
| V_{CBO} | Collector-Base Voltage | -32 | V |
| V_{CEO} | Collector-Emitter Voltage | -32 | V |
| V_{EBO} | Emitter-Base Voltage | -5.0 | V |
| I_C | Collector Current | -100 | mA |
| P_C | Collector Power Dissipation | 350 | mW |
| T_{STG} | Storage Temperature | -55 ~ 150 | $^\circ\text{C}$ |

• Refer to KST5086 for graphs

BCW61A/B/C/D

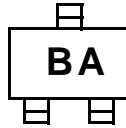
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Max. | Units |
|----------------------|--------------------------------------|--|-------------|----------------|--------|
| BV_{CEO} | Collector-Emitter Breakdown Voltage | $I_C = -2\text{mA}, I_B = 0$ | -32 | | |
| BV_{EBO} | Emitter-Base Breakdown Voltage | $I_E = -1\mu\text{A}, I_C = 0$ | -5 | | |
| I_{CES} | Collector Cut-off Current | $V_{CB} = -32\text{V}, V_{BE} = 0$ | | -20 | |
| h_{FE} | DC Current Gain | | | | |
| | : BCW61B | $V_{CE} = -5\text{V}, I_C = -10\mu\text{A}$ | 20 | | V |
| | : BCW61C | | 40 | | |
| | : BCW61D | | 100 | | |
| | : BCW61A | $V_{CE} = -5\text{V}, I_C = -2\text{mA}$ | 120 | 220 | V |
| | : BCW61B | | 140 | 310 | |
| | : BCW61C | | 250 | 460 | |
| | : BCW61D | | 380 | 630 | |
| | : BCW61A | $V_{CE} = -5\text{V}, I_C = -50\text{mA}$ | 60 | | nA |
| | : BCW61B | | 80 | | |
| | : BCW61C | | 100 | | |
| | : BCW61D | | 100 | | |
| $V_{CE}(\text{sat})$ | Collector-Emitter Saturation Voltage | $I_C = -50\text{mA}, I_B = -1.25\text{mA}$ $I_C = -10\text{mA}, I_B = -0.25\text{mA}$ | | -0.55 -0.25 | V V |
| $V_{BE}(\text{sat})$ | Base-Emitter Saturation Voltage | $I_C = -50\text{mA}, I_B = -1.25\text{mA}$ $I_C = -10\text{mA}, I_B = -0.25\text{mA}$ | 0.68 0.6 | 1.05 0.85 | V V |
| $V_{BE}(\text{on})$ | Base-Emitter On Voltage | $V_{CE} = -5\text{V}, I_C = -2\text{mA}$ | 0.6 | 0.75 | V |
| C_{ob} | Output Capacitance | $V_{CB} = -10\text{V}, I_E = 0$ $f = 1\text{MHz}$ | | 6 | pF |
| NF | Noise Figure | $I_C = -0.2\text{mA}, V_{CE} = -5\text{V}$ $R_G = 20\text{K}\Omega, f = 1\text{KHz}$ | | 6 | dB |
| t_{ON} | Turn On Time | $I_C = -10\text{mA}, I_{B1} = -1\text{mA}$ | | 150 | ns |
| t_{OFF} | Turn Off Time | $V_{BB} = -3.6\text{V}, B22 = -1\text{mA}$ $R1 = R2 = 5.0\text{K}\Omega, R_L = 990\Omega$ | | 800 | ns |

Marking Code

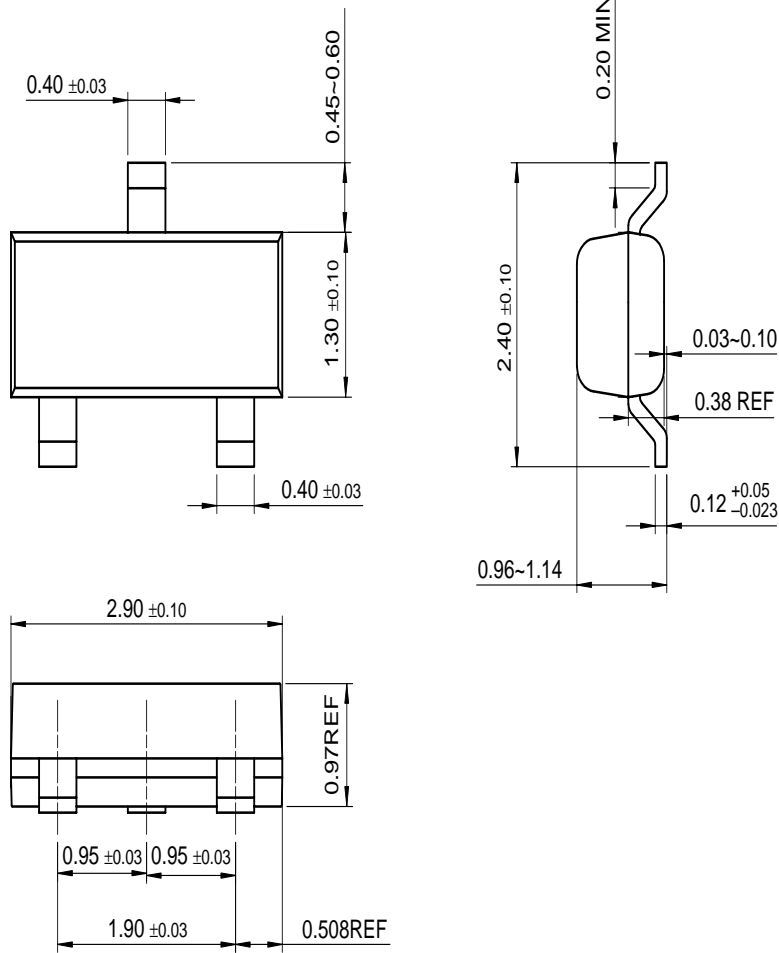
| Type | BCW61A | BCW61B | BCW61C | BCW61D |
|-------|--------|--------|--------|--------|
| Mark. | BA | BB | BC | BD |

Marking



Package Demensions

SOT-23



Dimensions in Millimeters

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Definition of Terms

| Datasheet Identification | Product Status | Definition |
|--------------------------|------------------------|---|
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| No Identification Needed | Full Production | This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design. |
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