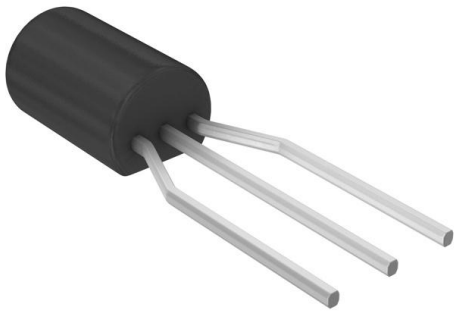


2SA1015-Y-BP Datasheet

www.digi-electronics.com



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

| | |
|------------------------------|--|
| DiGi Electronics Part Number | 2SA1015-Y-BP-DG |
| Manufacturer | Micro Commercial Co |
| Manufacturer Product Number | 2SA1015-Y-BP |
| Description | TRANS PNP 50V 0.15A TO92 |
| Detailed Description | Bipolar (BJT) Transistor PNP 50 V 150 mA 80MHz 400 mW Through Hole TO-92 |



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:

2SA1015-Y-BP

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

50 V

Current - Collector Cutoff (Max):

100nA (ICBO)

Power - Max:

400 mW

Operating Temperature:

-55°C ~ 125°C (TJ)

Package / Case:

TO-226-3, TO-92-3 (TO-226AA)

Base Product Number:

2SA1015

Manufacturer:

Micro Commercial Co

Product Status:

Obsolete

Current - Collector (Ic) (Max):

150 mA

Vce Saturation (Max) @ Ib, Ic:

300mV @ 10mA, 100mA

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

120 @ 2mA, 6V

Frequency - Transition:

80MHz

Mounting Type:

Through Hole

Supplier Device Package:

TO-92

Environmental & Export classification

RoHS Status:

RoHS Compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.21.0095


Micro Commercial Components


Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

2SA1015-O
2SA1015-Y
2SA1015-GR

PNP Silicon
Plastic-Encapsulate
Transistor

Features

- Capable of 0.4Watts of Power Dissipation.
- Collector-current: -0.15A
- Collector-base Voltage: -50V
- Operating and storage junction temperature range: -55°C to +125°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:A1015
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|----------------------------|--|-----|------|---------------|
| OFF CHARACTERISTICS | | | | |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage ($I_C = -0.1\text{mA}$, $I_E = 0$) | -50 | --- | Vdc |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage ($I_C = -100\mu\text{A}$, $I_E = 0$) | -50 | --- | Vdc |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage ($I_E = -100\mu\text{A}$, $I_C = 0$) | -5 | --- | Vdc |
| I_{CBO} | Collector Cutoff Current ($V_{CB} = -50\text{Vdc}$, $I_E = 0$) | --- | -0.1 | μA |
| I_{EBO} | Emitter Cutoff Current ($V_{EB} = -5.0\text{Vdc}$, $I_C = 0$) | --- | -0.1 | μA |

ON CHARACTERISTICS

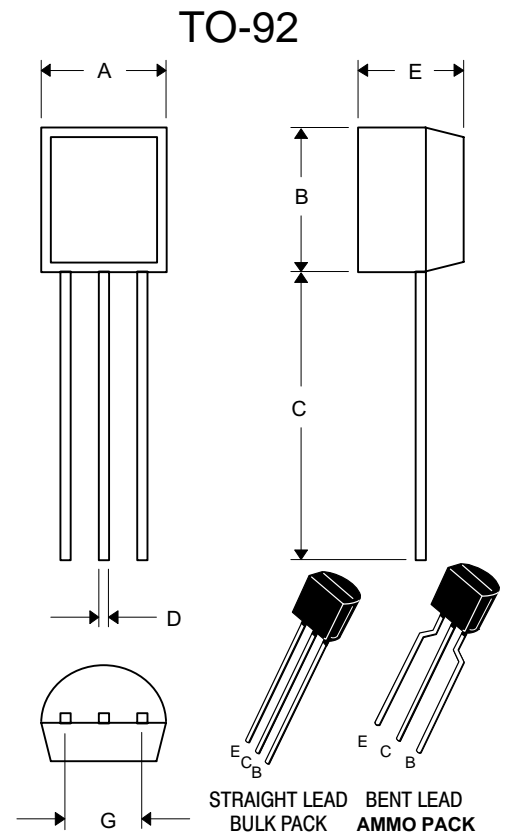
| | | | | |
|---------------|--|-----|------|-----|
| h_{FE} | DC Current Gain ($I_C = -2.0\text{mA}$, $V_{CE} = -6.0\text{Vdc}$) | 70 | 400 | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C = -100\text{mA}$, $I_E = -10\text{mA}$) | --- | -0.3 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage ($I_C = -100\text{mA}$, $I_E = -10\text{mA}$) | --- | -1.1 | Vdc |

SMALL-SIGNAL CHARACTERISTICS

| | | | | |
|----------|--|-----|-----|-----|
| f_T | Transistor Frequency ($I_C = -1.0\text{mA}$, $V_{CE} = -10\text{Vdc}$, $f = 30\text{MHz}$) | 80 | --- | MHz |
| C_{OB} | Collector Output Capacitance ($V_{CB} = -10\text{Vdc}$, $I_E = 0$, $f = 1\text{MHz}$) | --- | 7.0 | pF |
| NF | Noise Figure ($V_{CE} = -6\text{Vdc}$, $I_C = -0.1\text{mA}$, $f = 1\text{KHz}$, $R_g = 10\text{K}$) | --- | 6.0 | dB |

CLASSIFICATION OF h_{FE} (1)

| | | | |
|-------|--------|---------|---------|
| Rank | O | Y | GR |
| Range | 70-140 | 120-240 | 200-400 |



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|------|---------------|
| | MIN | MAX | MIN | MAX | |
| A | .175 | .185 | 4.45 | 4.70 | |
| B | .175 | .185 | 4.45 | 4.70 | |
| C | .500 | --- | 12.70 | --- | |
| D | .016 | .020 | 0.41 | 0.63 | |
| E | .135 | .145 | 3.43 | 3.68 | |
| G | .095 | .105 | 2.42 | 2.67 | Straight Lead |
| | .173 | .220 | 4.40 | 5.60 | Bent Lead |

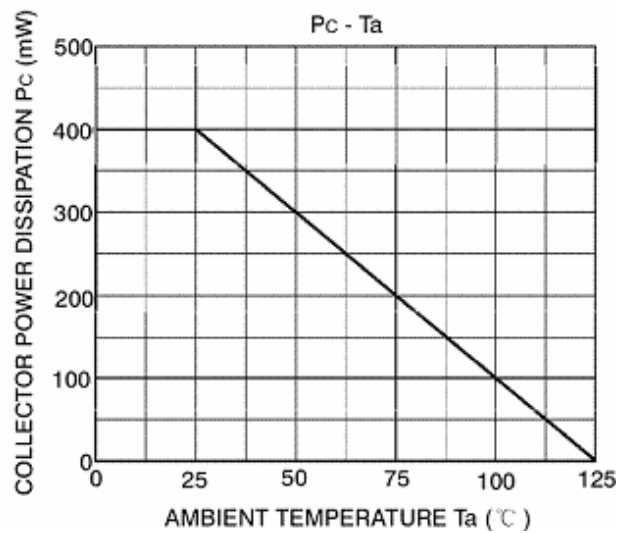
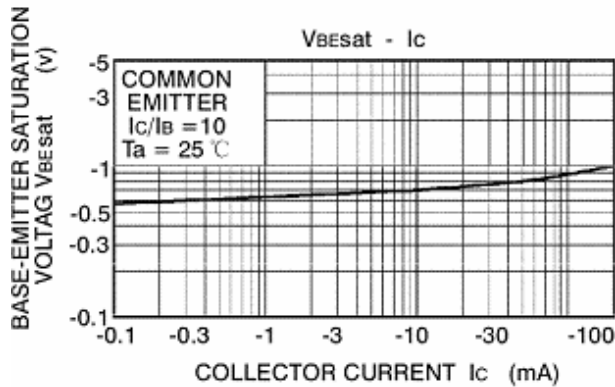
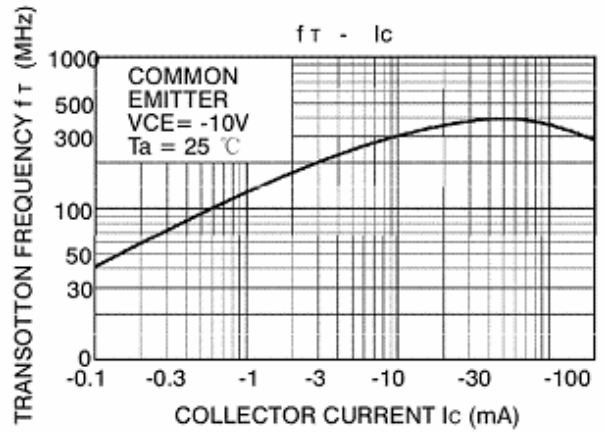
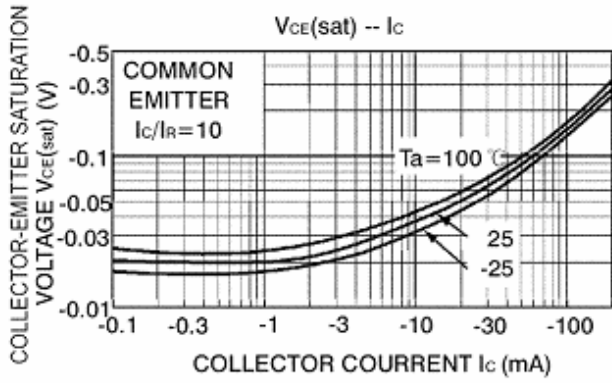
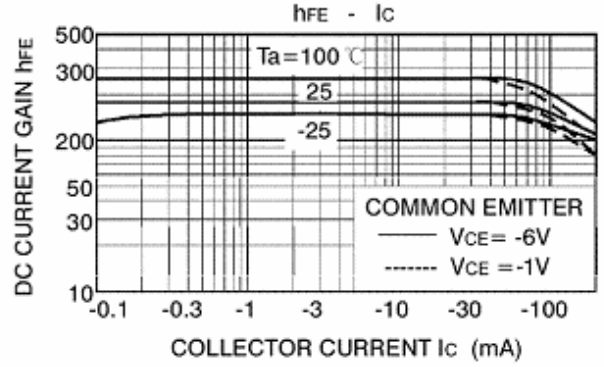
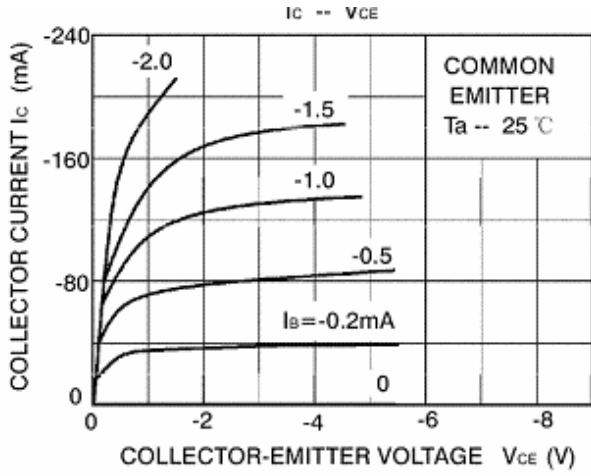
* For ammo packing detailed specification, click here to visit our website of product packaging for details.

www.mccsemi.com



2SA1015

Typical Characteristics





Ordering Information :

| Device | Packing |
|----------------|-----------------------------|
| Part Number-AP | Ammo Packing: 20Kpcs/Carton |
| Part Number-BP | Bulk: 100Kpcs/Carton |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.