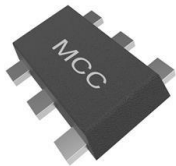


# BAS40V-TP Datasheet

[www.digi-electronics.com](http://www.digi-electronics.com)



|                              |   |
|------------------------------|---|
| DiGi Electronics Part Number | BAS40V-TP-DG  |
| Manufacturer                 | <a href="#">Micro Commercial Co</a>                                 |
| Manufacturer Product Number  | BAS40V-TP   |
| Description                  | DIODE ARR SCHOT 40V 200MA SOT563                                    |
| Detailed Description         | Diode Array 2 Independent 40 V 200mA Surface Mount SOT-563, SOT-666 |

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

This model BAS40V-TP is available at DiGi Electronics.

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## Purchase and inquiry

Manufacturer Product Number:

BAS40V-TP

Series:

-

Diode Configuration:

2 Independent

Voltage - DC Reverse (Vr) (Max):

40 V

Voltage - Forward (Vf) (Max) @ If:

1 V @ 40 mA

Reverse Recovery Time (trr):

5 ns

Operating Temperature - Junction:

-55°C ~ 125°C

Package / Case:

SOT-563, SOT-666

Base Product Number:

BAS40

Manufacturer:

Micro Commercial Co

Product Status:

Active

Technology:

Schottky

Current - Average Rectified (Io) (per Diode):

200mA

Speed:

Small Signal =< 200mA (Io), Any Speed

Current - Reverse Leakage @ Vr:

200 nA @ 30 V

Mounting Type:

Surface Mount

Supplier Device Package:

SOT-563

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0070

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

**Features**

- Fast Switching Speed
- Low Forward Voltage Drop
- PN Junction Guard Ring for Transient and ESD Protection
- Lead Free Plating
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings**

- . Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 667°C/W Junction to Ambient

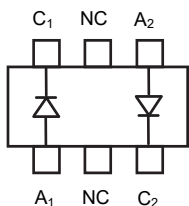
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|-----------------------------|
| BAS40V          | KAN            | 40V                                    | 40V                         |

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

|   |            |                 |   |
|---|------------|-----------------|---|
| Minimum Reverse Breakdown Voltage                       | $V_{(BR)}$ | 40V             | $I_R = 10\mu A$                                       |
| Average Forward Current                                 | $I_F$      | 200mA           |   |
| Power Dissipation                                       | $P_d$      | 150mW           |   |
| Maximum Forward Voltage                                 | $V_F$      | 380mV<br>1000mV | $I_F=1.0mA, t_p<300\mu s$<br>$I_F=40mA, t_p<300\mu s$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$      | 0.2 $\mu A$     | $V_R = 30V, t_p<300\mu s$                             |
| Maximum Total Capacitance                               | $C_T$      | 5.0pF           | Measured at 1.0MHz, $V_R=0.0V$                        |
| Maximum Reverse Recovery Time                           | $t_{rr}$   | 5nS             | $I_F=I_R=10mA, I_{rr}=1mA, R_L=100\Omega$             |

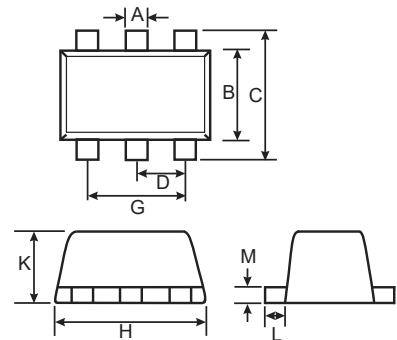
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Internal Structure:**



**150mW, 40Volt Schottky Barrier Diode**

**SOT-563**



| DIM | DIMENSIONS |       |      |      | NOTE |
|-----|------------|-------|------|------|------|
|     | INCHES     |       | MM   |      |      |
|     | MIN        | MAX   | MIN  | MAX  |      |
| A   | 0.006      | 0.011 | 0.15 | 0.30 |      |
| B   | 0.043      | 0.051 | 1.10 | 1.30 |      |
| C   | 0.059      | 0.067 | 1.50 | 1.70 |      |
| D   | 0.020      |       | 0.50 |      | TYP. |
| G   | 0.035      | 0.043 | 0.90 | 1.10 |      |
| H   | 0.059      | 0.067 | 1.50 | 1.70 |      |
| K   | 0.022      | 0.026 | 0.55 | 0.65 |      |
| L   | 0.004      | 0.011 | 0.10 | 0.30 |      |
| M   | 0.004      | 0.007 | 0.10 | 0.18 |      |

### Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

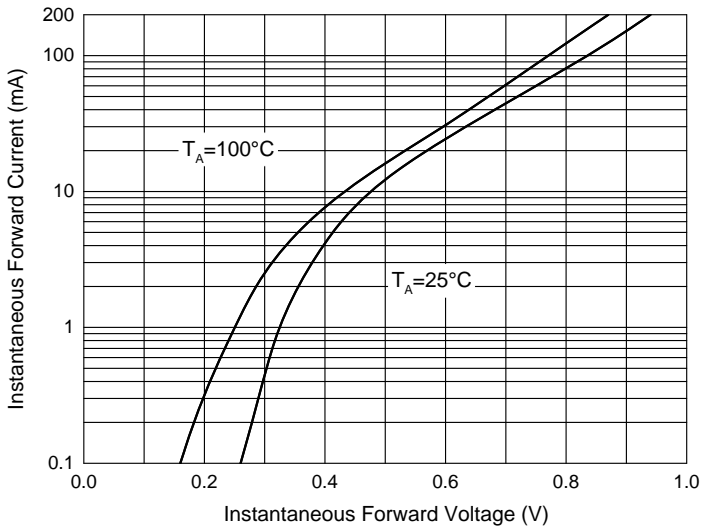


Fig. 2 - Typical Reverse Leakage Characteristics

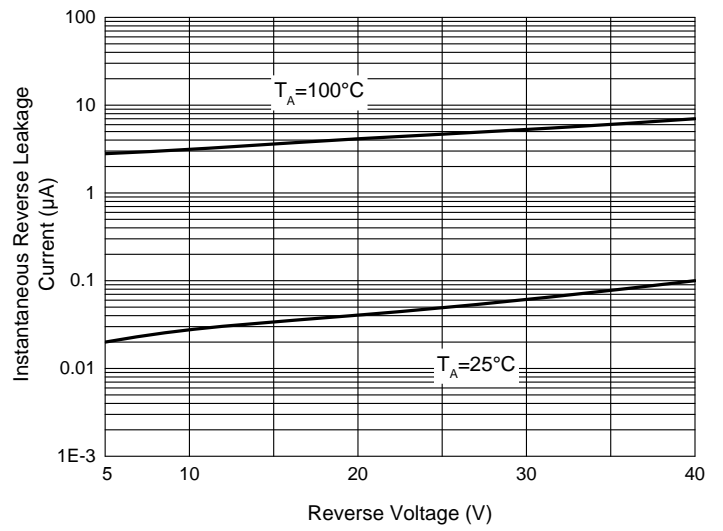
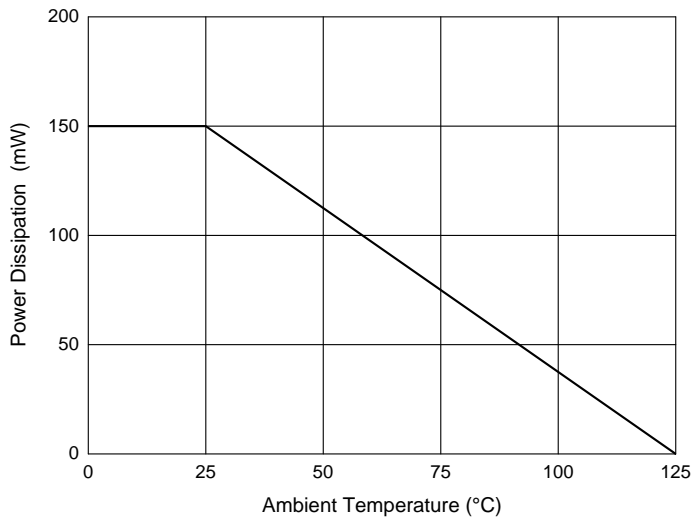


Fig. 3 - Power Derating Curve



## Ordering Information

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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