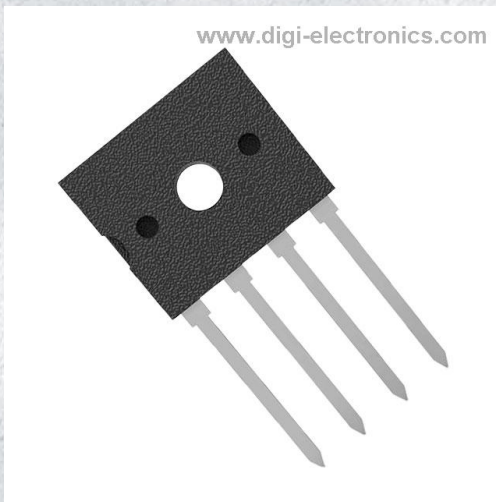


UD3KB100-BP Datasheet



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

DiGi Electronics Part Number	UD3KB100-BP-DG
Manufacturer	Micro Commercial Co
Manufacturer Product Number	UD3KB100-BP
Description	BRIDGE RECT 1PHASE 1KV 3A D3K
Detailed Description	Bridge Rectifier Single Phase Standard 1 kV Through Hole D3K



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:

UD3KB100-BP

Series:

-

Diode Type:

Single Phase

Voltage - Peak Reverse (Max):

1 kV

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

1.05 V @ 1.5 A

Operating Temperature:

-55°C ~ 150°C (TJ)

Package / Case:

4-SIP

Base Product Number:

UD3KB100

Manufacturer:

Micro Commercial Co

Product Status:

Active

Technology:

Standard

Current - Average Rectified (Io):

3 A

Current - Reverse Leakage @ Vr:

10 μ A @ 1000 V

Mounting Type:

Through Hole

Supplier Device Package:

D3K

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



E502650

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- High Surge Forward Current Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1.5°C/W Junction to Case(Note2)
- Typical Thermal Resistance: 55°C/W Junction to Ambient Without Heatsink

Mechanical Data

- Mounting Torque: 0.5 N•m

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UD3KB05	UD3KB05	50V	35V	50V
UD3KB10	UD3KB10	100V	70V	100V
UD3KB20	UD3KB20	200V	140V	200V
UD3KB40	UD3KB40	400V	280V	400V
UD3KB60	UD3KB60	600V	420V	600V
UD3KB80	UD3KB80	800V	560V	800V
UD3KB100	UD3KB100	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

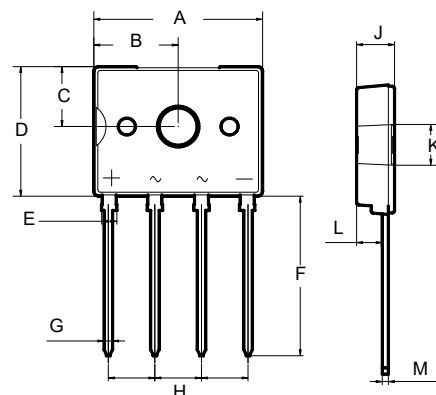
Average Forward Current	$I_{F(AV)}$	3.0A	$T_C=140^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	90A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_{FM}=1.5\text{A};$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA	$T_J=25^\circ\text{C}$
I^2t Rating for fusing	I^2t	35A ² S	(1ms < t < 8.3ms)

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

3 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

D3K



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.524	0.563	13.30	14.30	
B	0.252	0.291	6.40	7.40	
C	0.177	0.217	4.50	5.50	
D	0.406	0.445	10.30	11.30	
E	0.041	0.057	1.05	1.45	
F	0.516	0.531	13.10	13.50	
G	0.024	0.033	0.60	0.85	
H	0.146	0.154	3.70	3.90	
J	0.102	0.142	2.60	3.60	
K	0.122	0.134	3.10	3.40	
L	0.079	0.087	2.00	2.20	
M	0.016	0.024	0.40	0.60	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

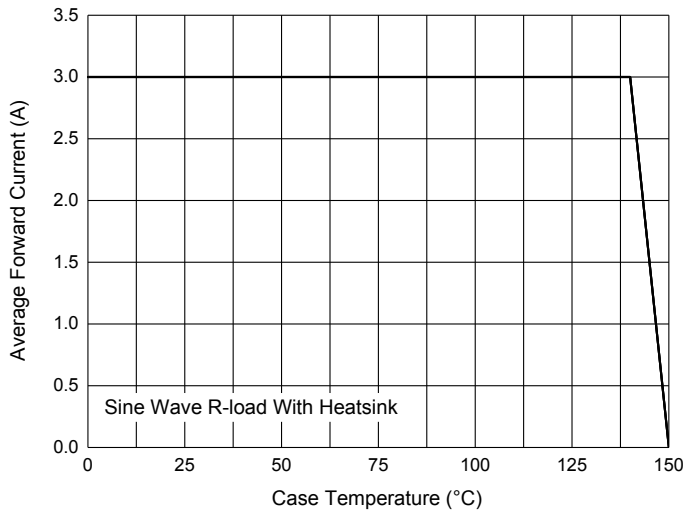


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

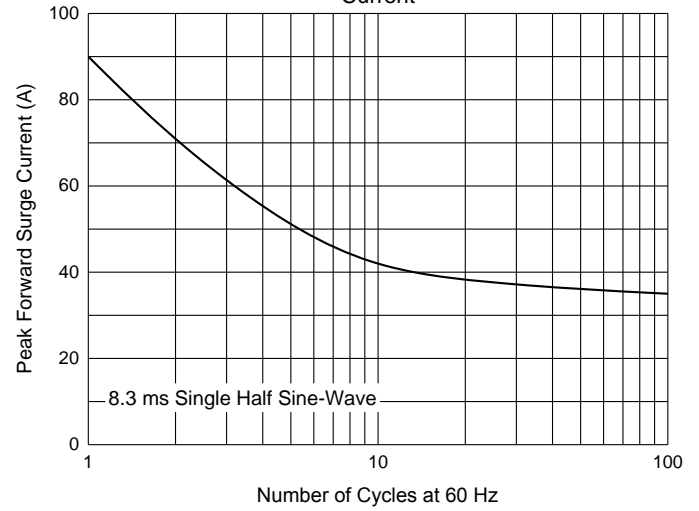


Fig. 3 - Typical Instantaneous Forward Characteristics

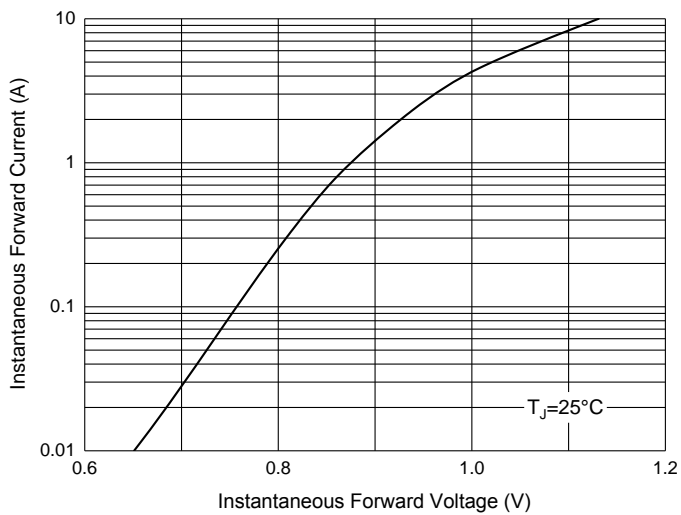
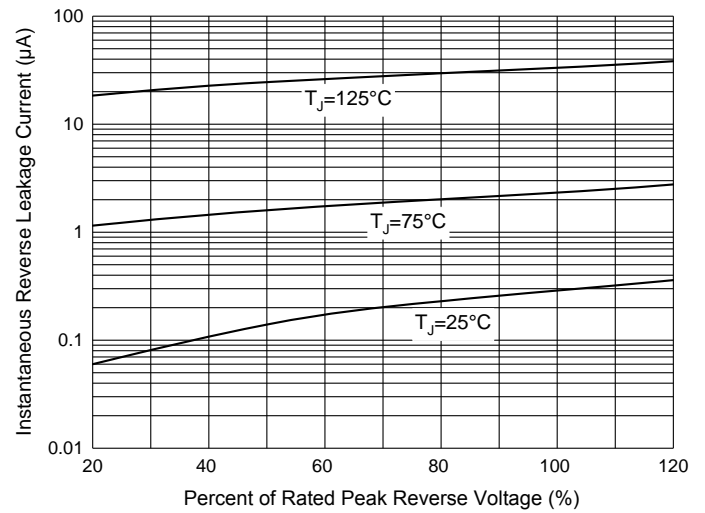


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Ó\KÍ] & Ð à^Éí €€] & Ð[øÉ S] & Ðæð }

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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