



Micro Commercial Components



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# UD3KB05 THRU UD3KB100

## 3 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

### Features

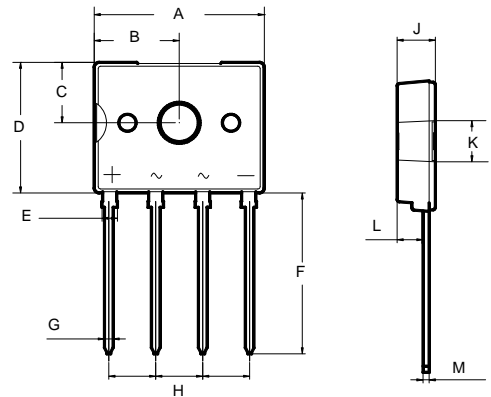
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- High surge forward current capability
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Mounting Torque: 0.5 N•m
- UL Recognized File # E165989

MCC Catalog 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

D3K



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.524	.563	13.30	14.30	
B	.252	.291	6.40	7.40	
C	.177	.217	4.50	5.50	
D	.406	.445	10.30	11.30	
E	.041	.057	1.05	1.45	
F	.516	.531	13.10	13.50	
G	.024	.033	0.60	0.85	
H	.146	.154	3.70	3.90	
J	.102	.142	2.60	3.60	
K	.122	.134	3.10	3.40	
L	.079	.087	2.00	2.20	
M	.016	.024	0.40	0.60	

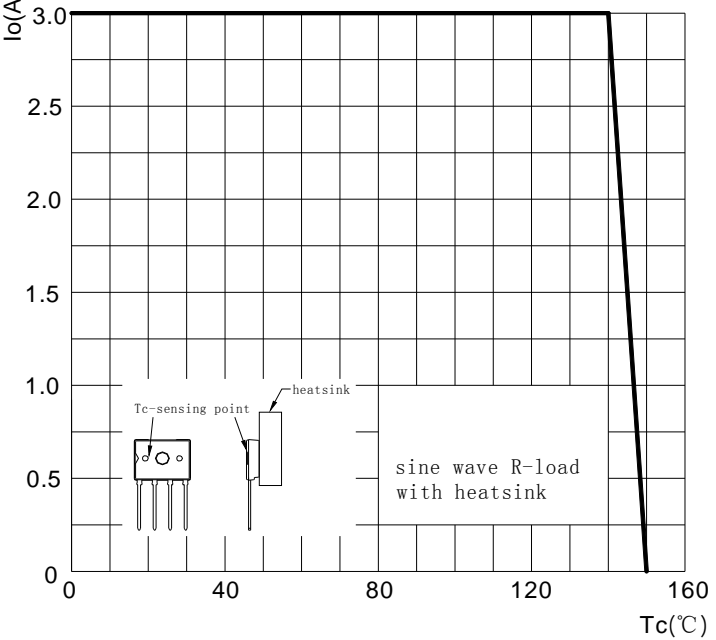
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0 A	$T_c = 140^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	90A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.05V	$I_{FM} = 1.5A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$	$T_a = 25^\circ\text{C}$
$I^2t$ Rating for fusing	$I^2t$	35A <sup>2</sup> S	(1ms < t < 8.3ms)
Thermal Resistance	$R_{thJA}$ $R_{thJC}$	55°C/W 1.5°C/W	

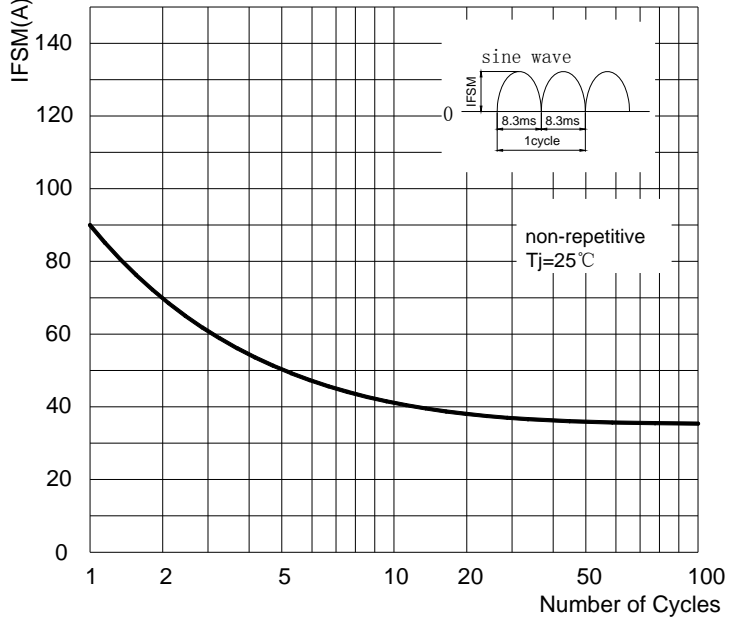
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

**Characteristics(Typical)**

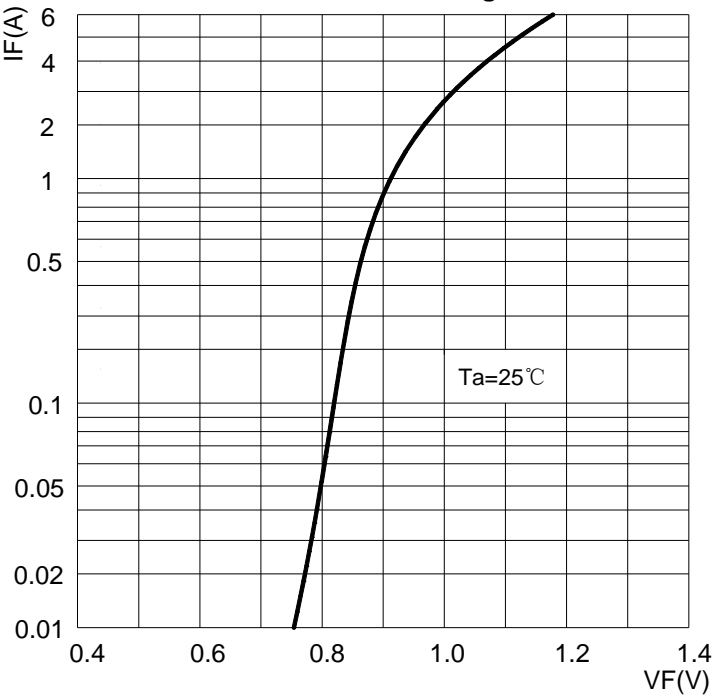
**FIG1:Io-Tc Curve**



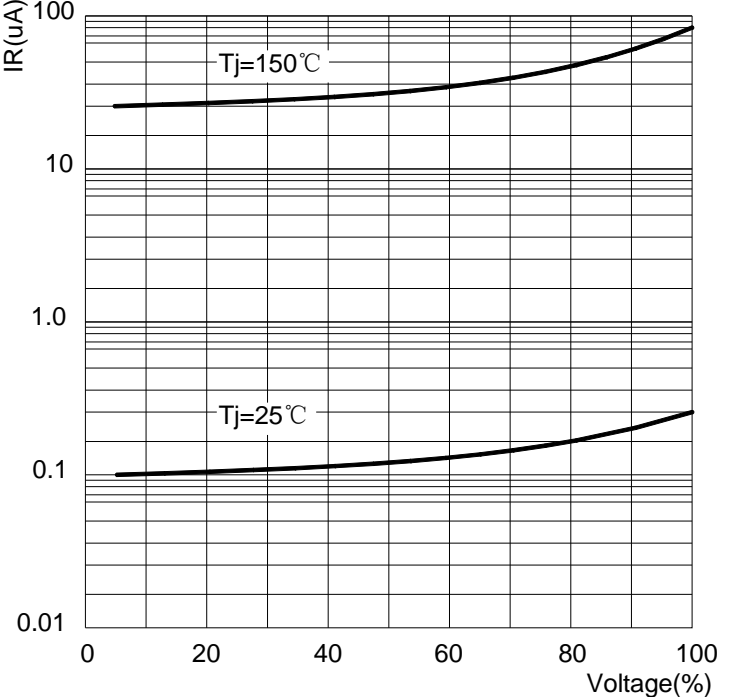
**FIG2:Surge Forward Current Capadility**



**FIG3: Forward Voltage**



**FIG4:Typical Reverse Characteristics**





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### Ordering Information :

Device	Packing
Part Number-BP	Bulk: 1.5Kpcs/Box

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

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