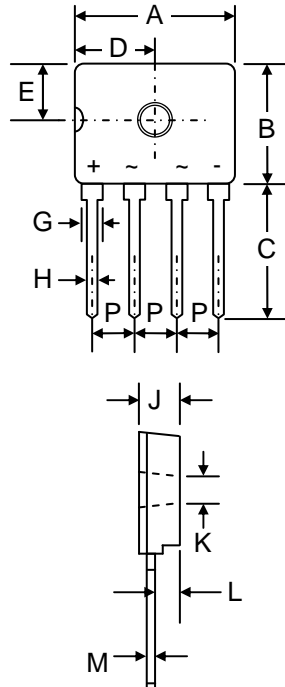


Features

- **Compact Package 3.1mm Case Thickness**
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Forward Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

Mechanical Data

- Case: D3K, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.5 grams (approx.)
- Marking: Type Number
- Mounting Position: Any
- Mounting Torque: 0.8 N.m Max.
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



D3K		
Dim	Min	Max
A	13.30	14.30
B	10.30	11.30
C	13.10	13.50
D	6.40	7.40
E	4.50	6.10
G	1.05	1.45
H	0.60	0.85
J	2.60	3.60
K	3.10	3.40
L	2.00	2.20
M	0.40	0.60
P	3.70	3.90
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	D3KB	D3KB	D3KB	D3KB	D3KB	D3KB	D3KB	Unit
		05	10	20	40	60	80	100	
Peak Repetitive Reverse Voltage	V_{RRM}								V
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_C = 140^\circ\text{C}$	I_O	3.0							A
Average Rectified Output Current (Note 2) @ $T_C = 30^\circ\text{C}$		1.2							
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	90							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	35							A^2s
Forward Voltage per leg @ $I_F = 1.5\text{A}$	V_{FM}	1.05							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	10 500							μA
Thermal Resistance Junction to Lead (Note 2)	R_{JL}	15							$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Case (Note 1)	R_{JC}	1.5							
RMS Isolation Voltage Terminals to Case, $t = 1\text{ min}$	V_{ISO}	2000							V
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Mounted on FR-4 PCB with Al. heatsink.
2. Mounted on FR-4 PCB without heatsink.

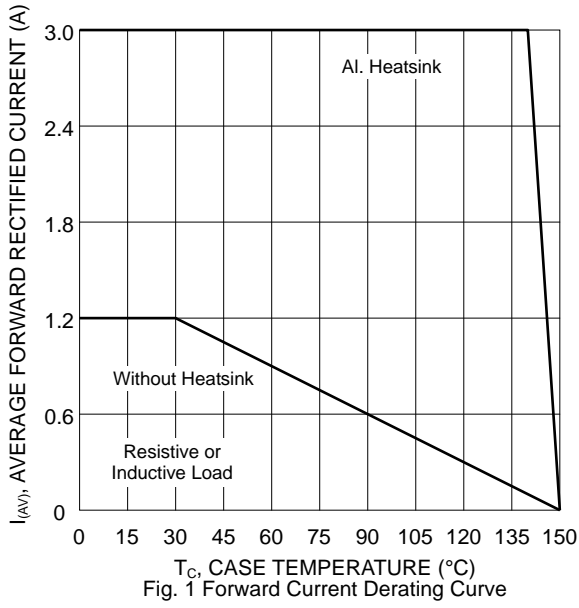


Fig. 1 Forward Current Derating Curve

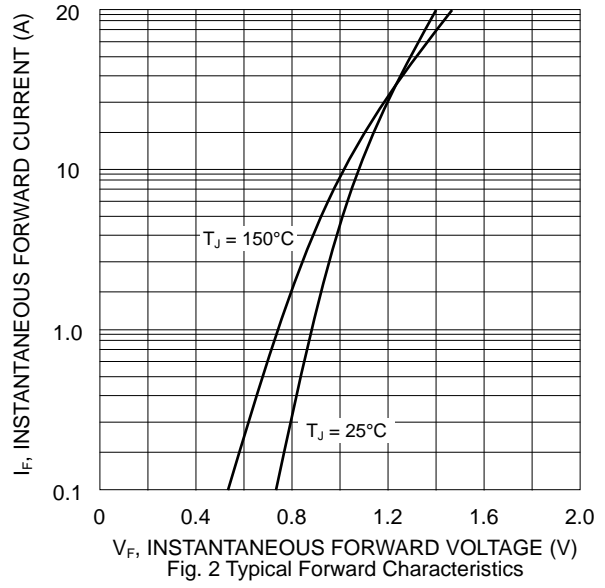


Fig. 2 Typical Forward Characteristics

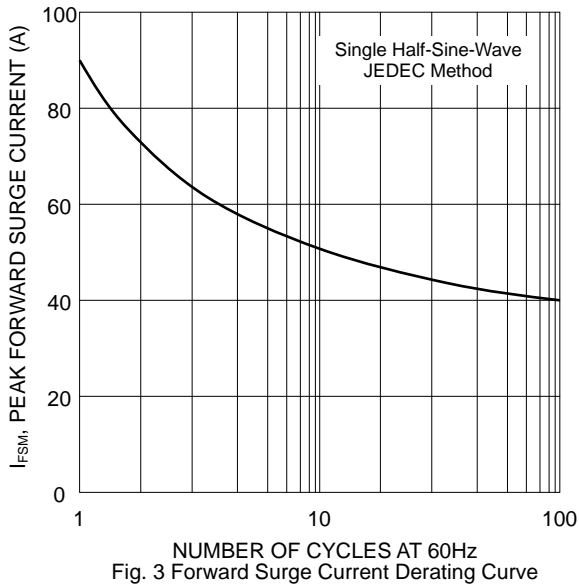


Fig. 3 Forward Surge Current Derating Curve

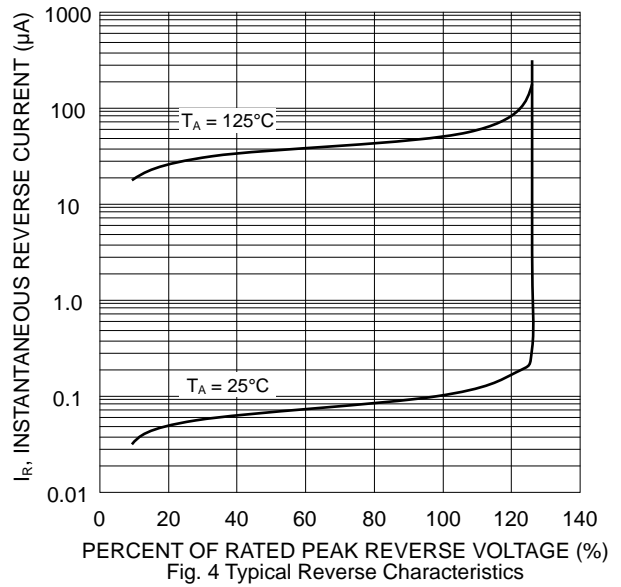


Fig. 4 Typical Reverse Characteristics

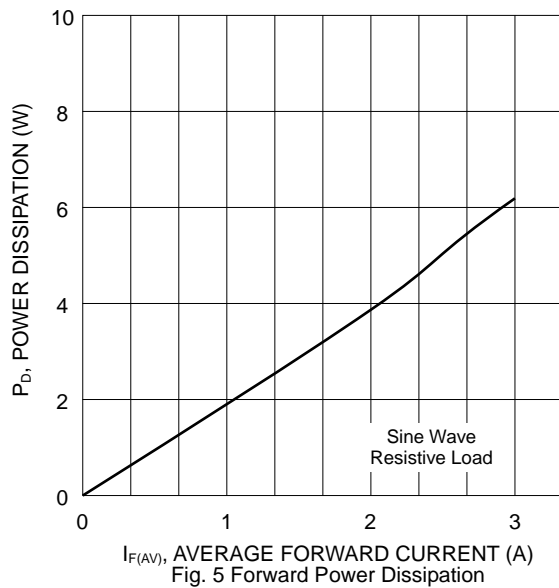
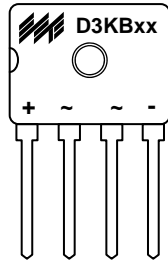


Fig. 5 Forward Power Dissipation

MARKING INFORMATION



D3KBxx = Device Number
 xx = 05, 10, 20, 40, 60, 80, 100
 Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
365 x 29 x 6	25	382 x 152 x 94	1,500	390 x 312 x 200	6,000	23.0

Note: 1. Anti-static tube, water clear color.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
D3KB05	SIL Bridge	25 Units/Tube
D3KB10	SIL Bridge	25 Units/Tube
D3KB20	SIL Bridge	25 Units/Tube
D3KB40	SIL Bridge	25 Units/Tube
D3KB60	SIL Bridge	25 Units/Tube
D3KB80	SIL Bridge	25 Units/Tube
D3KB100	SIL Bridge	25 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, D3KB05-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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