

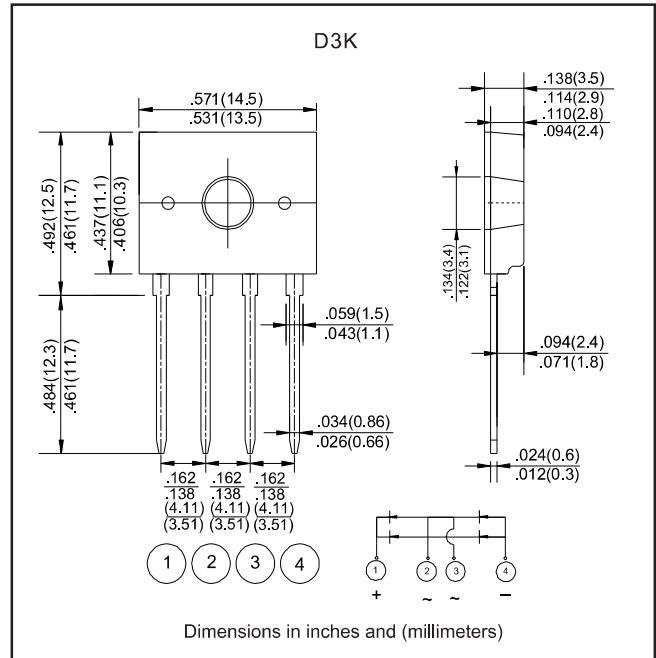
Features

- Surge overload ratings to 80 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction technique
- Lead-free parts for green partner, meet RoHS requirements
- Suffix "-H" indicates Halogen free parts, ex. D3UB100-H.

Mechanical data

- Case: Potted plastic round body D3K
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: As marked
- Mounting Position: Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_o			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			80	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^\circ\text{C}$	I_R			5.0	uA
	$V_R = V_{RRM}$ $T_J = 125^\circ\text{C}$				500	
I^2t Rating for fusing	$t < 8.3$ ms	I^2t			27	A^2s
Typical thermal resistance	Junction to case(with heatsink)	$R_{\theta JC}$		1.5		$^\circ\text{C}/\text{W}$
Storage temperature		T_{STG}	-65		+175	$^\circ\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^\circ\text{C}$)
D3UB05	50	35	50	1.0	-55 to +150
D3UB10	100	70	100		
D3UB20	200	140	200		
D3UB40	400	280	400		
D3UB60	600	420	600		
D3UB80	800	560	800		
D3UB100	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage @ $I_F=3.0\text{A}$

Rating and characteristic curves (D3UB05 THRU D3UB100)

FIG.1-DERATING CURVE
OUTPUT RECTIFIED CURRENT

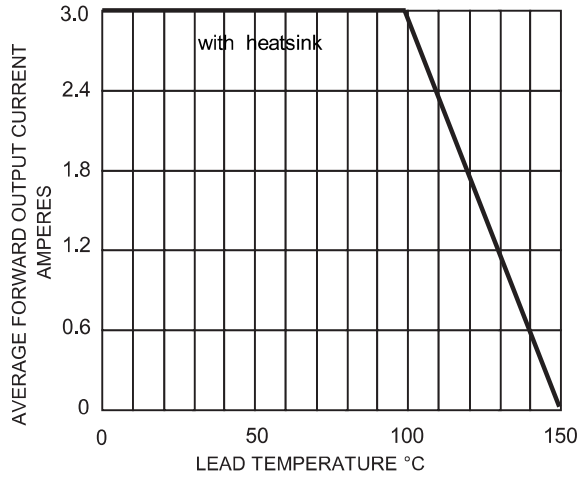


FIG.2-TYPICAL FORWARD CHARACTERISTICS

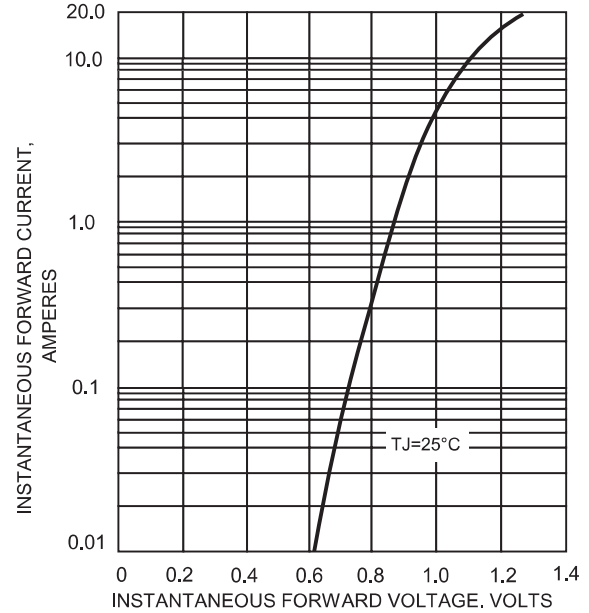


FIG.3-TYPICAL REVERSE CHARACTERISTICS

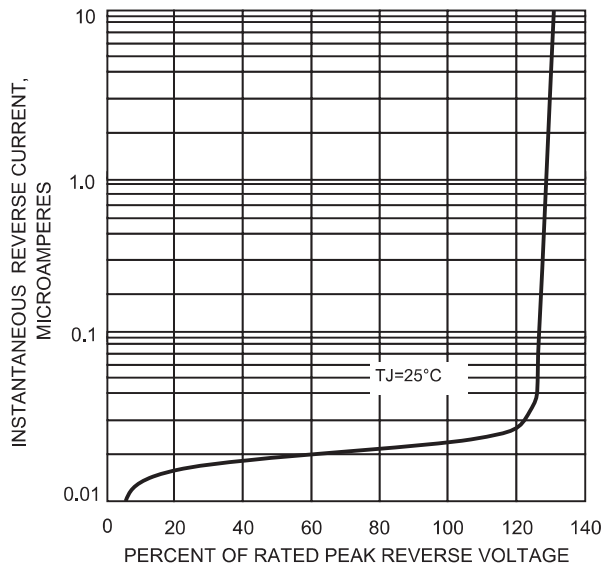
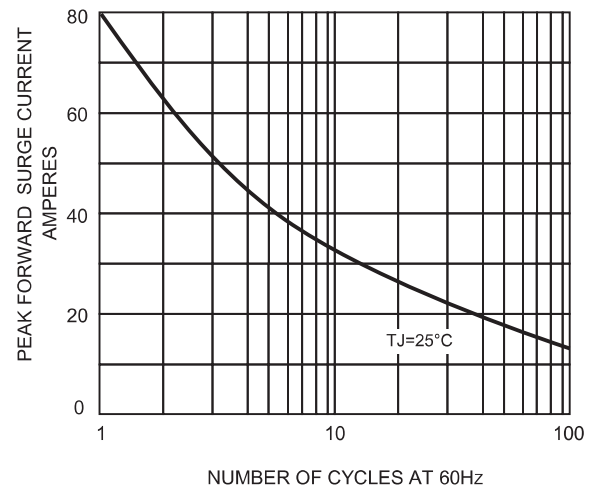
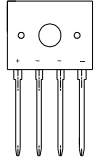
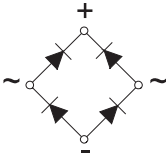


FIG.4-MAXIMUM FORWARD SURGE CURRENT



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
D3UB05	D3UB05
D3UB10	D3UB10
D3UB20	D3UB20
D3UB40	D3UB40
D3UB60	D3UB60
D3UB80	D3UB80
D3UB100	D3UB100