

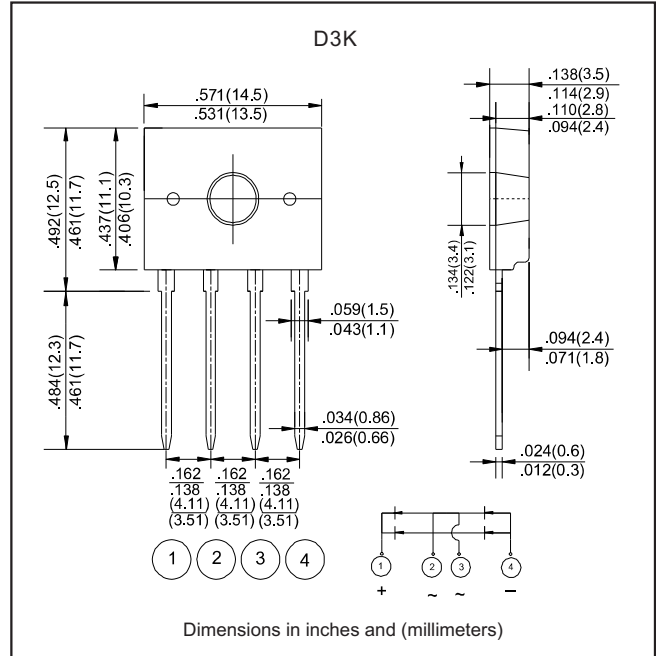
### Features

- Surge overload ratings to 150 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. D6UB100-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	$I_o$			6.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	$I_{FSM}$			150	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	$I^2t$			93	$\text{A}^2\text{s}$
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 $T_J$ , ( $^\circ\text{C}$ )
D6UB05	50	35	50	1.00	-55 to +150
D6UB10	100	70	100		
D6UB20	200	140	200		
D6UB40	400	280	400		
D6UB60	600	420	600		
D6UB80	800	560	800		
D6UB100	1000	700	1000		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage @  $I_F=6.0\text{A}$

## Rating and characteristic curves (D6UB05 THRU D6UB100)

FIG.1-DERATING CURVE  
OUTPUT RECTIFIED CURRENT

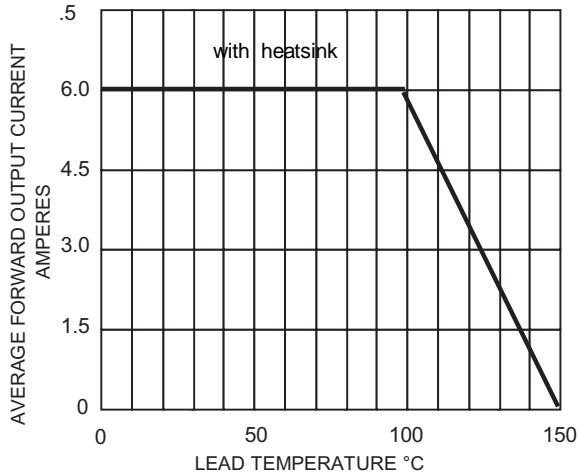


FIG.2-TYPICAL FORWARD CHARACTERISTICS

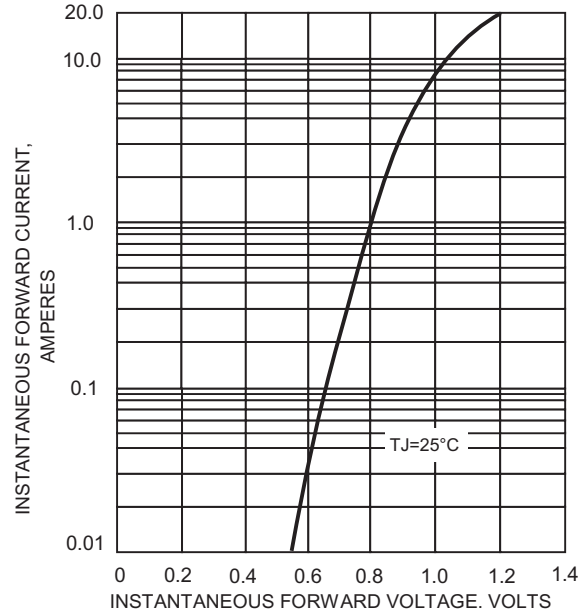


FIG.3-TYPICAL REVERSE CHARACTERISTICS

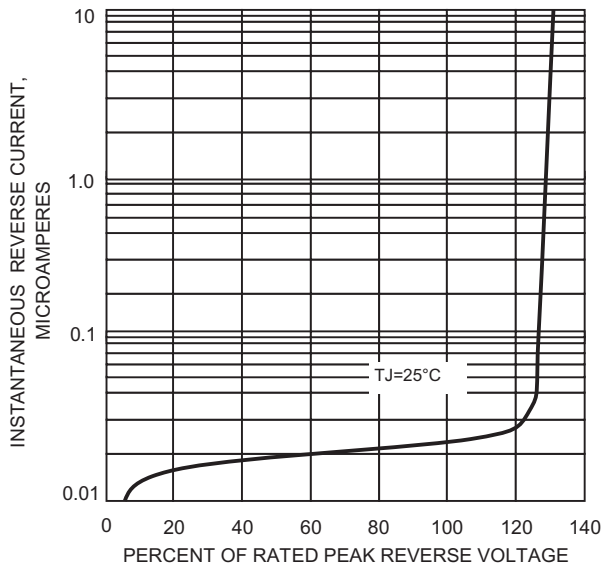
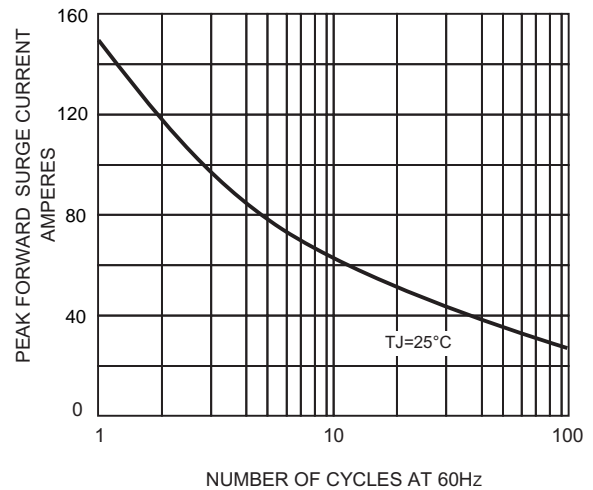
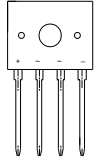
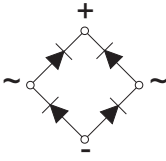


FIG.4-MAXIMUM FORWARD SURGE CURRENT



### Pinning information

Simplified outline	Symbol
	

### Marking

Type number	Marking code
D6UB05	D6UB05
D6UB10	D6UB10
D6UB20	D6UB20
D6UB40	D6UB40
D6UB60	D6UB60
D6UB80	D6UB80
D6UB100	D6UB100