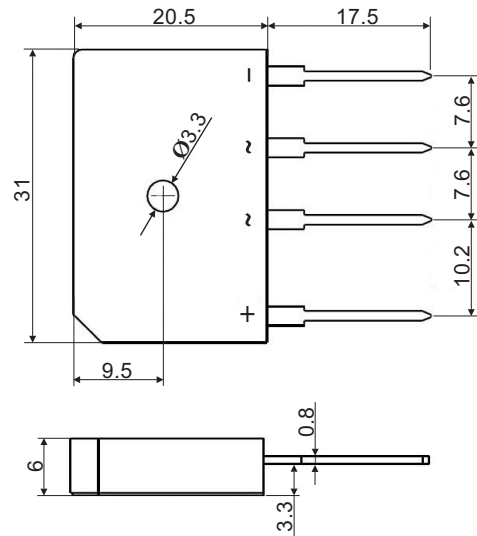
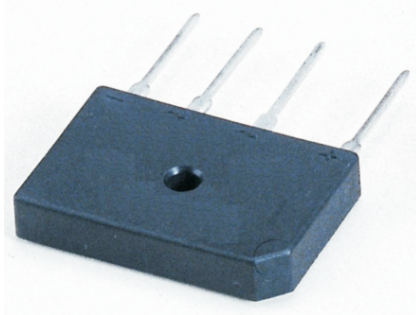


## Single-Phase Bridge Rectifier, 35A

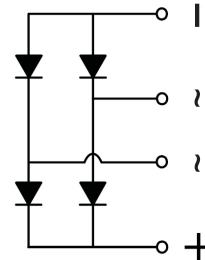
### KBJ3504 Thru KBJ3512



All dimensions in millimeters

#### FEATURES

- UL recognition file number E320098
- Typical IR less than 2.0  $\mu\text{A}$
- High surge current capability
- Low thermal resistance
- Compliant to RoHS
- Isolation voltage up to 2500V



#### TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for big power supply, field supply for DC motor, industrial automation applications.

#### ADVANTAGE

- International standard package  
Epoxy meets UL 94 V-O flammability rating
- Small volume, light weight
- Small thermal resistance
- High heat-conduction rate
- Low temperature rise
- **Weight:** 10g (0.35 ozs)

#### PRIMARY CHARACTERISTICS

$I_{F(AV)}$	35A
$V_{RRM}$	400V to 1200V
$I_{FSM}$	400A
$I_R$	5 $\mu\text{A}$
$V_F$	1.10V
$T_{Jmax.}$	150°C

## Nell High Power Products

MAJOR RATINGS AND CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)							
PARAMETER	SYMBOL	KBJ35					UNIT
		04	06	08	10	12	
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	800	1000	1200	V
Peak reverse non-repetitive voltage	$V_{RSM}$	500	700	900	1100	1300	V
Maximum DC blocking voltage	$V_{DC}$	400	600	800	1000	1200	V
Maximum average forward rectified output current	$I_{F(AV)}$	35					A
Peak forward surge current single sine-wave superimposed on rated load	$I_{FSM}$	400					A
Rating (non-repetitive, for t greater than 1 ms and less than 8.3 ms) for fusing	$I^2t$	660					A <sup>2</sup> s
RMS isolation voltage from case to leads	$V_{ISO}$	2500					V
Operating junction storage temperature range	$T_J$	-40 to 150					°C
Storage temperature range	$T_{STG}$	-40 to 125					°C

ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	KBJ35					UNIT
			04	06	08	10	12	
Maximum instantaneous forward drop per diode	$I_F = 17.5\text{A}$	$V_F$	1.10					V
Maximum reverse DC current at rated DC blocking voltage per diode	$T_A = 25^\circ\text{C}$	$I_R$	5					$\mu\text{A}$
	$T_A = 150^\circ\text{C}$		500					

THERMAL AND MECHANICAL ( $T_A = 25^\circ\text{C}$ unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	KBJ35					UNIT
			04	06	08	10	12	
Typical thermal resistance junction to case	Single-side heat dissipation, sine half wave	$R_{\theta JC}^{(1)}$	1.0					°C/W
Mounting torque to heatsink M3 $\pm 10\%$	A mounting compound is recommended and the torque should be rechecked after a period of 3 hours to allow for the spread of the compound.		2.5					Nm
Approximate weight			10					g

**Notes**

- (1) With heatsink, single side heat dissipation, half sine wave.  
 (2) M3 screw.

