



**Square bridge**

## Three-Phase Si-Bridge Rectifiers

DB 15-005 ... DB 15-16

**Forward Current: 15 A**

**Reverse Voltage: 50 to 1600 V**

Publish Data

### Features

- Max. solder temperature: 260 °C, max. 5s
- UL recognized, file no. E63532
- $V_{ISO} > 2500 \text{ V}$

### Mechanical Data

- Plastic case with alu-bottom
- Dimensions: 28,5 28,5 10 mm
- Weight approx. 23 g
- Standard packaging: bulk
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position: any
- Admissible torque for mounting (M 5): 2 (± 10%) Nm

Type	Alternating input voltage $V_{RMS}$ V	Repetitive peak reverse voltage $V_{RRM}$ V
DB 15-005	35	50
DB 15-01	70	100
DB 15-02	140	200
DB 15-04	280	400
DB 15-06	420	600
DB 15-08	560	800
DB 15-10	700	1000
DB 15-12	800	1200
DB 15-14	900	1400
DB 15-16	1000	1600

Absolute Maximum Ratings $T_c = 25 \text{ °C}$ unless otherwise specified			
Symbol	Conditions	Values	Units
$I_{FRM}$	Repetitive peak forward current; $f > 15 \text{ Hz}^{1)}$	80	A
$I^2t$	Rating for fusing, $t < 10 \text{ ms}$	310	A <sup>2</sup> s
$I_{FSM}$	Peak forward surge current, 50 Hz half sine-wave $T_A = 25 \text{ °C}$	250	A
$I_{FAV}$	Max. averaged fwd. current, R-load, $T_A = 50 \text{ °C}^{1)}$	not applicable	A
$I_{FAV}$	Max. averaged fwd. current, C-load, $T_A = 50 \text{ °C}^{1)}$	not applicable	A
$I_{FAV}$	Max. current with cooling fin, R-load, $T_c = 100 \text{ °C}^{2)}$	15	A
$I_{FAV}$	Max. current with cooling fin, C-load, $T_c = 100 \text{ °C}^{2)}$	15	A
$R_{thA}$	Thermal resistance junction to ambient <sup>1)</sup>		K/W
$R_{thC}$	Thermal resistance junction to case <sup>1)</sup>	3,3	K/W
$T_j$	Operating junction temperature	- 50 ... + 150 °C	°C
$T_s$	Storage temperature	- 50 ... + 150 °C	°C

Characteristics $T_c = 25 \text{ °C}$ unless otherwise specified			
Symbol	Conditions	Values	Units
$V_F$	Maximum forward. voltage, $T_j = 25 \text{ °C}$ ; $I_F = 7,5 \text{ A}$	1,05	V
$I_R$	Maximum Leakage current, $T_j = 25 \text{ °C}$ ; $V_R = V_{RRM}$	10	μA
$C_j$	Typical junction capacitance per leg at V, MHz		pF



