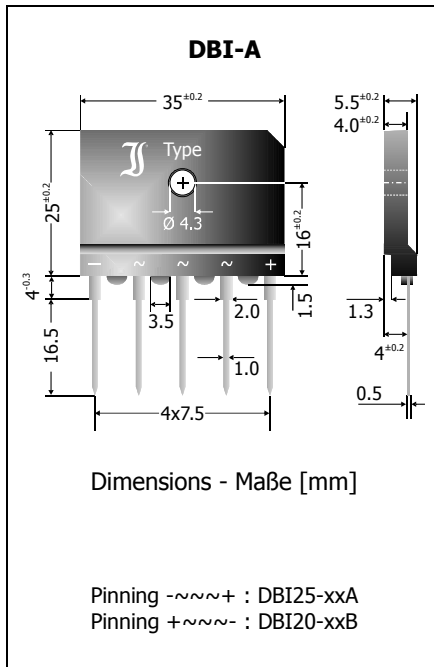


**DBI25-08A ... DBI25-18A**  
**Three Phase Bridge Rectifier**  
**Dreiphasen-Brückengleichrichter**

$I_{FAV} = 25 \text{ A (115}^\circ\text{C)}$   $V_{RRM} = 800\text{...}1800 \text{ V}$   
 $I_{FAV} = 40 \text{ A (85}^\circ\text{C)}$   $I_{FSM} = 370/390 \text{ A}$   
 $V_F < 1.05 \text{ V}$   $T_{jmax} = 175^\circ\text{C}$

Version 2016-02-02



**Typical Application**

50/60 Hz Mains Rectification  
Power Supplies, Drive Inverter,  
Battery Charger, HVAC Devices  
Commercial grade <sup>1)</sup>

**Features**

UL recognized, File E175067  
Solderable leads for PCB  
assembly; Enlarged creepage  
and clearance for direct  
heatsink assembly  
Compliant to RoHS, REACH,  
Conflict Minerals <sup>1)</sup>

**Mechanical Data <sup>1)</sup>**

Packed in tubes/cardboards 15/300  
Weight approx. 9 g  
Case material UL 94V-0  
Solder & assembly conditions 260°C/10s  
MSL N/A

**Typische Anwendung**

50/60 Hz Netzgleichrichtung  
Stromversorgungen, Antriebsum-  
richter, Ladegeräte, Klimageräte  
Standardausführung <sup>1)</sup>

**Besonderheit**

UL-anerkannt, Liste E175067  
Lötbar Anschlüsse für Leiter-  
plattenmontage; Vergrößerte  
Luft- und Kriechstrecken für  
direkte Kühlkörpermontage  
Konform zu RoHS, REACH,  
Konfliktmineralien <sup>1)</sup>

**Mechanische Daten <sup>1)</sup>**

Verpackt in Stangen/Kartons  
Gewicht ca.  
Gehäusematerial  
Löt- und Einbaubedingungen

**Maximum ratings <sup>2)</sup>**

**Grenzwerte <sup>2)</sup>**

Type Typ	Max. alternating input voltage Max. Eingangswchelspannung $V_{VRMS} [V] ^3)$	Repetitive peak reverse voltage Periodische Spitzensperrspannung $V_{RRM} [V] ^4)$	Surge peak reverse voltage Stoßspitzensperrspannung $V_{RSM} [V] ^4)$
DBI25-08A	280	800	900
DBI25-12A	560	1200	1300
DBI25-16A	800	1600	1700
DBI25-18A	1000	1800	1900

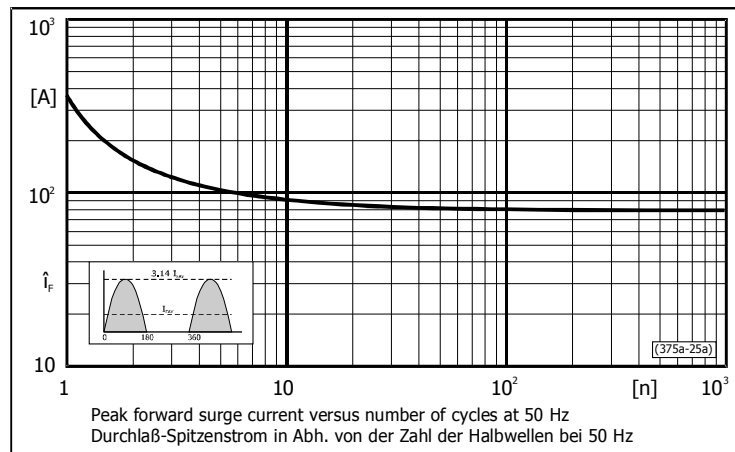
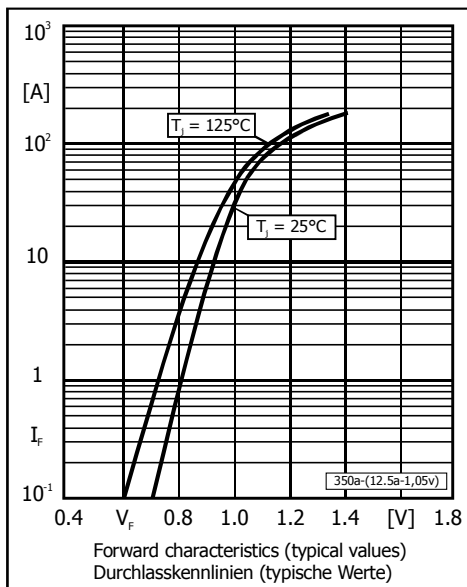
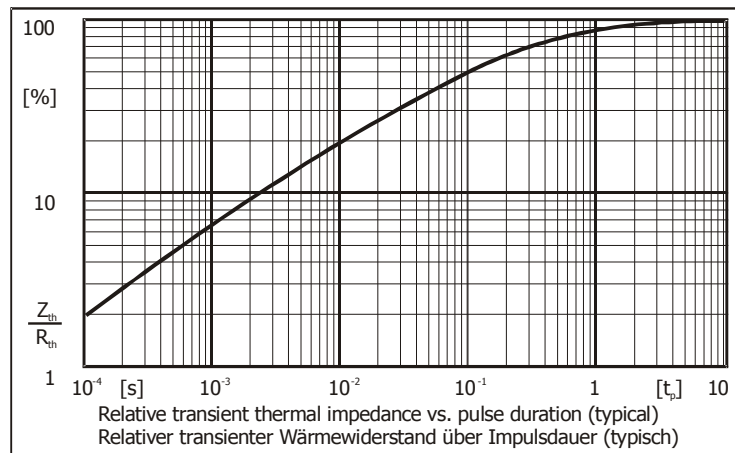
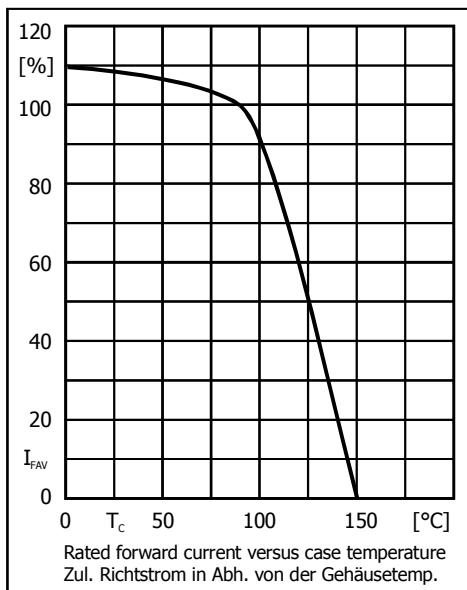
Max. output current mounted on heatsink Dauergrenzstrom am Brückenausgang bei Kühlkörpermontage (R or C load)	$T_C = 85^\circ\text{C}$ $T_C = 115^\circ\text{C}$ $T_C = 130^\circ\text{C}$ $T_C = 145^\circ\text{C}$	$I_{FAV}$ $I_{FAV}$ $I_{FAV}$ $I_{FAV}$	40 A 25 A 15 A 6 A
Max. output current without cooling – Dauergrenzstrom ohne Kühlung	$T_A = 50^\circ\text{C}$	$I_{FAV}$	4 A <sup>5)</sup>
Repetitive peak forward current – Periodischer Spitzenstrom	$f > 15 \text{ Hz}$	$I_{FRM}$	74 A <sup>5)</sup>
Peak forward surge current (half sine) – Stoßstrom Sinushalbwellen 50/60 Hz	$T_j = 25^\circ\text{C}$	$I_{FSM}$	370/390 A
Rating for fusing, $t < 10 \text{ ms}$ – Grenzlastintegral, $t < 10 \text{ ms}$	$T_A = 25^\circ\text{C}$	$i^2t$	680 A <sup>2</sup> s
Junction temperature – Sperrschichttemperatur Operating temperature – Betriebstemperatur Storage temperature – Lagerungstemperatur	$T_j$ $T_{op}$ $T_s$		-50...+175°C 150°C -50...+150°C
Admissible mounting torque Zulässiges Anzugsdrehmoment		M4	9 ± 10% lb.in. 1 ± 10% Nm

1 Please note the [detailed information on our website](#) or at the beginning of the data book  
Bitte beachten Sie die [detaillierten Hinweise auf unserer Internetseite](#) bzw. am Anfang des Datenbuches  
2  $T_j = 25^\circ\text{C}$  unless otherwise specified –  $T_j = 25^\circ\text{C}$  wenn nicht anders angegeben  
3 Eventual superimposed voltage peaks must not exceed  $V_{RRM}$  – Evtl. überlagerte Spannungsspitzen dürfen  $V_{RRM}$  nicht überschreiten  
4 Valid per diode – Gültig pro Diode  
5 Valid, if leads are kept at  $T_A$  at 5mm distance from case – Gültig, wenn die Anschlüsse in 5mm vom Geh. auf  $T_A$  gehalten werden

## Characteristics

## Kennwerte

Forward voltage – Durchlass-Spannung	$T_j = 25^\circ\text{C}$	$I_F = 12.5\text{ A}$	$V_F$	$< 1.05\text{ V}^{1)}$
Leakage current Sperrstrom	$T_j = 25^\circ\text{C}$ $T_j = 150^\circ\text{C}$	$V_R = V_{RRM}$	$I_R$ $I_R$	$< 5\ \mu\text{A}^{1)}$ $< 1500\ \mu\text{A}^{1)}$
Reverse recovery time – Sperrverzug	$I_F = 0.5\text{ A}$ through/über $I_R = 1\text{ A}$ to $I_R = 0.25\text{ A}$		$t_{rr}$	typ. $1500\text{ ns}^{1)}$
Typical junction capacitance – Typische Sperrschichtkapazität	$V_R = 4\text{ V}$		$C_j$	$95\text{ pF}$
Isolation voltage terminals to case – Isolationsspannung Anschlüsse zum Gehäuse			$V_{ISO}$	$> 2500\text{ V}$
Thermal resistance junction to ambient – Wärmewiderstand Sperrschicht – Umgebung			$R_{thA}$	$< 50\text{ K/W}^{1)}$
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse			$R_{thC}$ $R_{thC}$	$< 4.3\text{ K/W}^{1)}$ $< 0.7\text{ K/W}^{2)}$



**Disclaimer:** See data book page 2 or [website](#)  
**Haftungsausschluss:** Siehe Datenbuch Seite 2 oder [Internet](#)

1 Valid per diode – Gültig pro Diode  
2 Valid per device – Gültig pro Bauteil

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