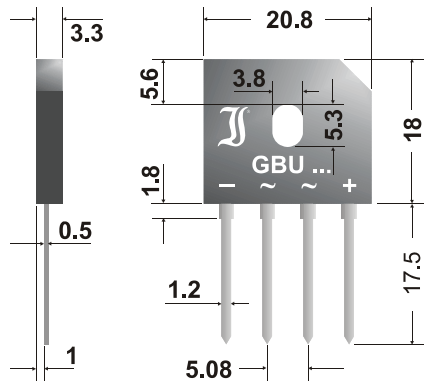
Silicon-Bridge Rectifiers **Silizium-Brückengleichrichter**



Dimensions / Maße in mm

Nominal current – Nennstrom	12 A
Alternating input voltage Eingangswechselspannung	35…700 V
Plastic case Kunststoffgehäuse	20.8 x 3.3 x 18 [mm]
Weight approx. – Gewicht ca.	3.8 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging: bulk Standard Lieferform: lose im Karton	see page 22 s. Seite 22

Recognized Product – Underwriters Laboratories Inc.® File E175067
Anerkanntes Produkt – Underwriters Laboratories Inc.® Nr. E175067

Maximum ratings **Grenzwerte**

Type Typ	max. alternating input voltage max. Eingangswechselspannung V_{VRMS} [V]	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] [1])
GBU 12A	35	50
GBU 12B	70	100
GBU 12D	140	200
GBU 12G	280	400
GBU 12J	420	600
GBU 12K	560	800
GBU 12M	700	1000

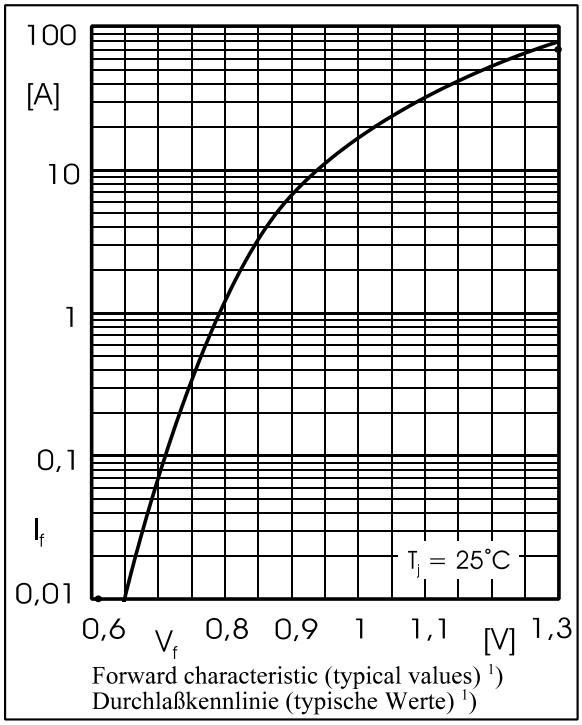
Repetitive peak fwd. current – Period. Spitzenstrom	f > 15 Hz	I_{FRM}	60 A [2])
Peak forward surge current, 60 Hz half sine-wave Stoßstrom für eine 60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	300 A
Rating for fusing – Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	375 A^2s
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	– 50…+150°C – 50…+150°C
Admissible torque for mounting Zulässiges Anzugsdrehmoment	M 4		9 ± 10% lb.in. 1 ± 10% Nm

[1]) Valid for one branch – Gültig für einen Brückenzweig
[2]) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case
Gültig, wenn die Anschlußdrähte in 10 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

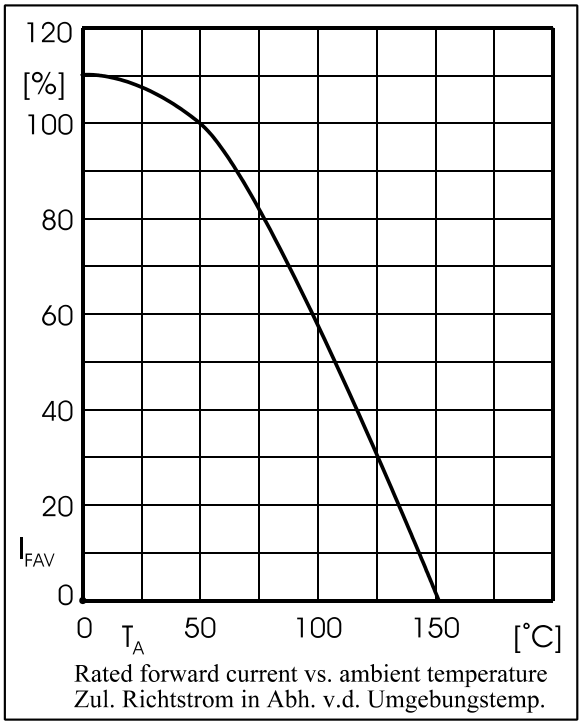
Characteristics — Kennwerte

Max. fwd. current without cooling fin Dauergrenzstrom ohne Kühlblech	T_A = 50°C	R-load C-load	I_{FAV} I_{FAV}	8.4 A 7.4 A
Max. current with cooling fin 300 cm² Dauergrenzstrom mit Kühlblech 300 cm²	T_A = 50°C	R-load C-load	I_{FAV} I_{FAV}	12.0 A 9.6 A
Forward voltage – Durchlaßspannung	T_j = 25°C	I_F = 12 A	V_F	< 1.0 V [1])
Leakage current – Sperrstrom	T_j = 25°C	$V_R = V_{RRM}$	I_R	< 10 µA
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse			R_{thC}	< 2.7 K/W

Type Typ	Max. admissible load capacitor Max. zulässiger Ladekondensator C_L [µF]	Min. required protective resistor Min. erforderl. Schutzwiderstand R_t [Ω]
GBU 12A	20000	0.2
GBU 12B	10000	0.4
GBU 12D	5000	0.8
GBU 12G	2500	1.6
GBU 12J	1500	2.4
GBU 12K	1000	3.2
GBU 12M	800	4.0



Forward characteristic (typical values) [1])
Durchlaßkennlinie (typische Werte) [1])



Rated forward current vs. ambient temperature
Zul. Richtstrom in Abh. v.d. Umgebungstemp.

[1]) Valid for one branch – Gültig für einen Brückenzweig

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.