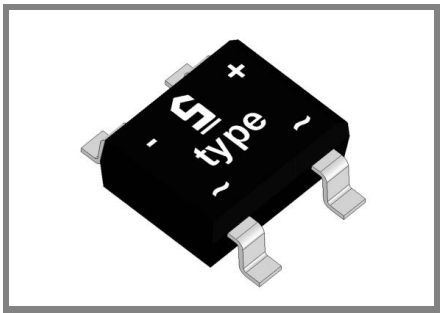
B 40FS ... B 380FS



Square bridge

Type	Alternating Input voltage V_{VRMS} V	Repetitive peak reverse voltage V_{RRM} V	Max. admissable load capacitor C_L µF	Min. required protective resistor R_t Ω
B 40FS	40	80	5000	0,8
B 80FS	80	160	2500	1,6
B 125FS	125	250	1500	2,5
B 250FS	250	600	800	5
B 380FS	380	800	600	8

Fast Switching Surface Mount Si-Bridge Rectifiers

B 40FS ... B 380FS

Forward Current: 1,0 A

Reverse Voltage: 80 to 800 V

Publish Data

Features

- max. solder temperature 260°C, max. 5s
- UL recognized, file no. E63532
- Standard packaging taped and reeled

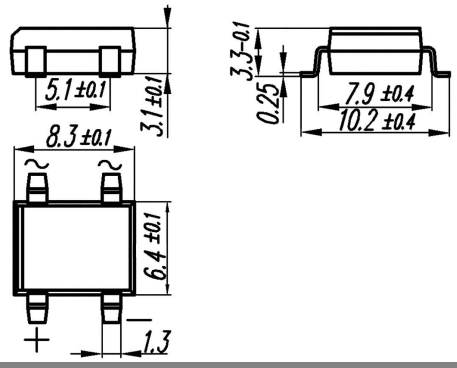
Mechanical Data

- Plastic case 8,3 * 6,4 * 3,1 [mm]
- Weight approx. 0,3 g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position: any

Absolute Maximum Ratings		T_c = 25 °C unless otherwise specified	
Symbol	**Conditions**	**Values**	**Units**
I^2t	Rating for fusing, t < 10 ms	8	A^2s
I_{FRM}	Repetitive peak forward current > 15 Hz	10	A
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave	40	A
t_{rr}	Reverse recovery time (I_F = 0,5 A)	<300 (I_R = 1 A to I_R = 0,25 A)	ns
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C 1)	1	A
I_{FAV}	Max. averaged fwd. current, C-load, T_A = 50 °C 1)	0,8	A
I_{FAV}	Max. current with cooling fin, R-load, T_C = °C 2)	/	A
I_{FAV}	Max. current with cooling fin, C-load, T_C = °C 2)	/	A
R_{thA}	Thermal resistance junction to ambient 1)	60	K/W
R_{thC}	Thermal resistance junction to case 1)		K/W
T_j	Operating junction temperature	- 50 ... + 150	°C
T_s	Storage temperature	- 50 ... + 150	°C

Characteristics		T_c = 25 °C unless otherwise specified	
Symbol	**Conditions**	**Values**	**Units**
V_F	Maximum forward. voltage, T_j = 25 °C, I_F = 1 A	1,3	V
I_R	Maximum leakage current, T_j = 25 °C, V_R = V_{RRM}	10	µA
C_J	Typical junction capacitance per leg at V, MHz		pF

Dimensions in mm



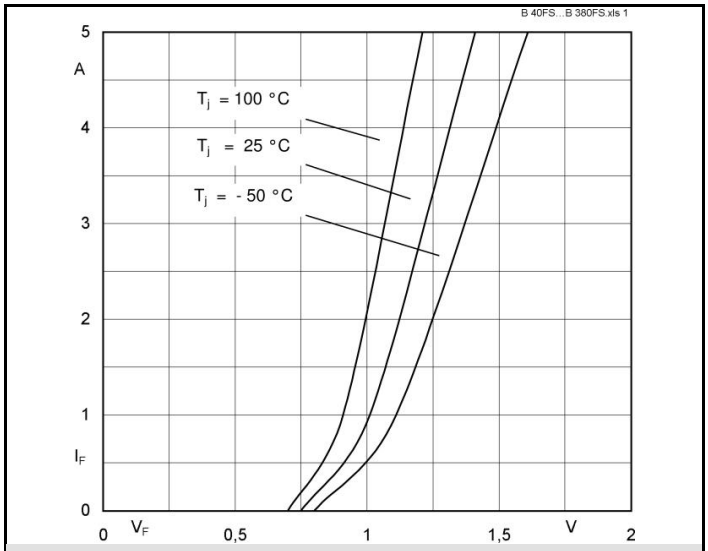


Fig. 1 : Forward characteristics (typical values)

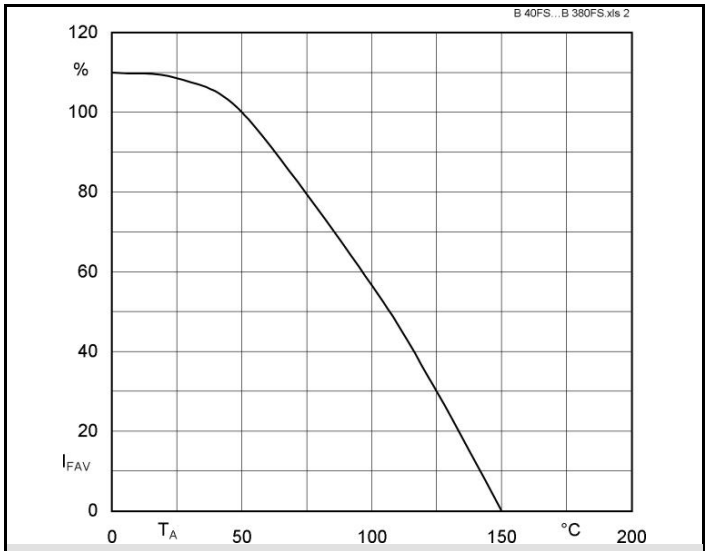


Fig. 2 : Rated forward current vs. ambient temperature

