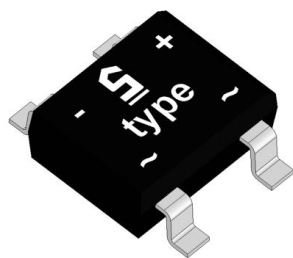


B 40FS ... B 380FS



Square bridge

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

Type	Alternating Input voltage V_{VRMS} V	Repetitive peak reverse voltage V_{RRM} V	Max. admissible 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

Absolute Maximum Ratings		$T_c = 25^\circ C$ unless otherwise specified	
Symbol	Conditions	Values	Units
I^2t	Rating for fusing, $t < 10$ ms	8	A ² s
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, $T_A = 50^\circ C$ ¹⁾	1	A
I_{FAV}	Max. averaged fwd. current, C-load, $T_A = 50^\circ C$ ¹⁾	0,8	A
I_{FAV}	Max. current with cooling fin, R-load, $T_c = ^\circ C$ ²⁾	/	A
I_{FAV}	Max. current with cooling fin, C-load, $T_c = ^\circ C$ 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		$T_c = 25^\circ C$ unless otherwise specified	
Symbol	Conditions	Values	Units
V_F	Maximum forward. voltage, $T_j = 25^\circ C$, $I_F = 1$ A	1,3	V
I_R	Maximum leakage current, $T_j = 25^\circ C$, $V_R = V_{RRM}$	10	μA
C_j	Typical junction capacitance per leg at V, MHz		pF

