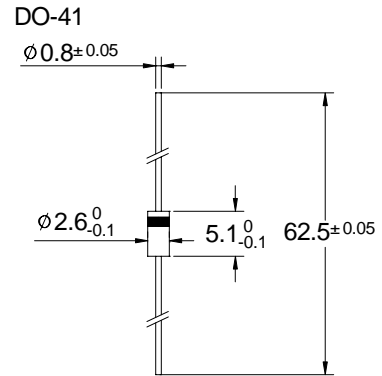


# D-BYW36, D-BYW38

## FAST SILICON RECTIFIERS

- Plastic material has UL Classification 94V-0
- Plastic case, DO-41

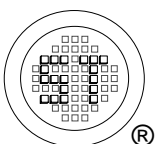
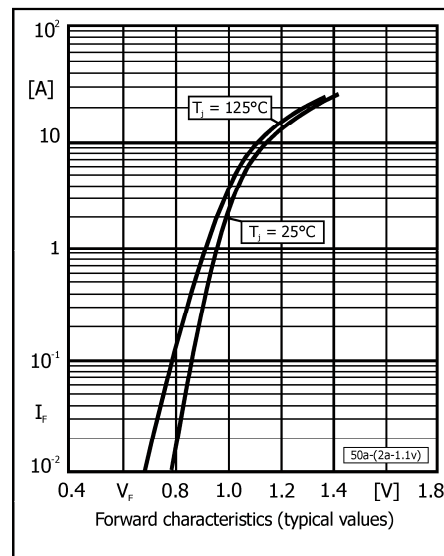
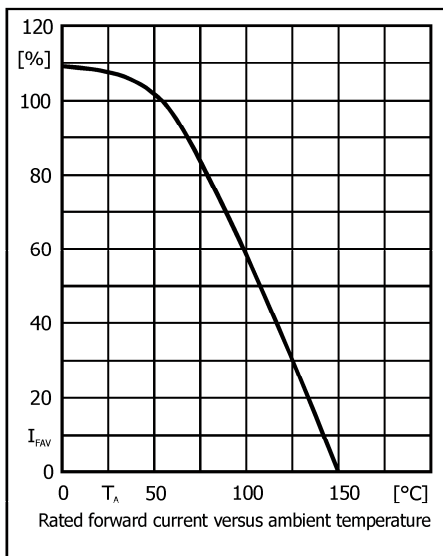


Dimensions in mm

### Absolute Maximum Ratings and Characteristics

Parameter	Symbols	D-BYW36	D-BYW38	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	600	600	V
Surge Peak Reverse Voltage	$V_{RSM}$	1000	1000	V
Maximum Average Forward Rectified Current, R-load at $T_A = 55\text{ °C}$	$I_{FAV}$	2 <sup>1)</sup>		A
Repetitive Peak Forward Current at $f > 15\text{ Hz}$	$I_{FRM}$	10 <sup>1)</sup>		A
Peak Forward Surge Current, 50/60 Hz Half sine-wave at $T_A = 25\text{ °C}$	$I_{FSM}$	40/45		A
Maximum Forward Voltage at $T_j = 25\text{ °C}$ , $I_F = 2\text{ A}$	$V_F$	1.2		V
Maximum Leakage Current $V_R = V_{RRM}$ $T_j = 25\text{ °C}$ $V_R = V_{RRM}$ $T_j = 100\text{ °C}$	$I_R$	5 50		$\mu\text{A}$
Reverse Recovery Time $I_F = 0.5\text{ A}$ through $I_R = 1\text{ A}$ to $I_R = 0.25\text{ A}$	$t_{rr}$	200		ns
Rating for Fusing, $t < 10\text{ ms}$ at $T_A = 25\text{ °C}$	$i^2t$	4.5		$\text{A}^2\text{s}$
Thermal Resistance Junction to Ambient Air	$R_{thA}$	45 <sup>1)</sup>		K/W
Operating Junction Temperature	$T_j$	- 50 to + 150		$^{\circ}\text{C}$
Storage Temperature	$T_s$	- 50 to + 175		$^{\circ}\text{C}$

<sup>1)</sup> Valid if leads are kept at ambient temperature at distance of 10 mm from case.



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098