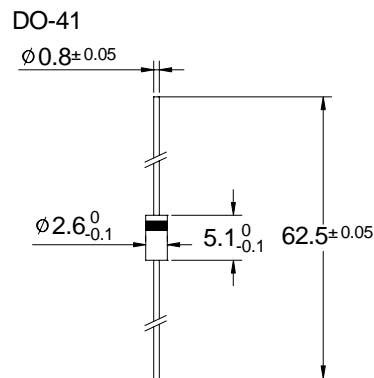


D-BYW36, D-BYW38

FAST SILICON RECTIFIERS

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

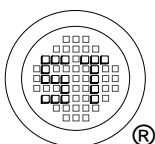
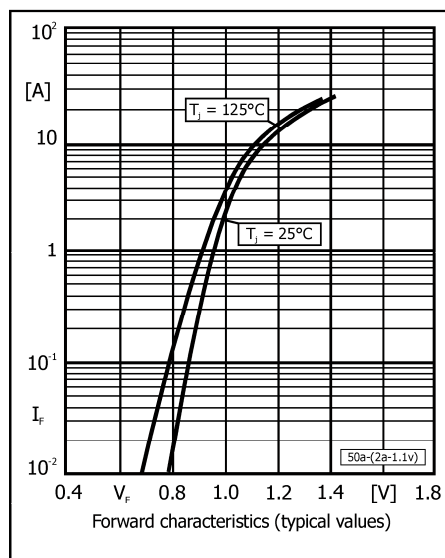
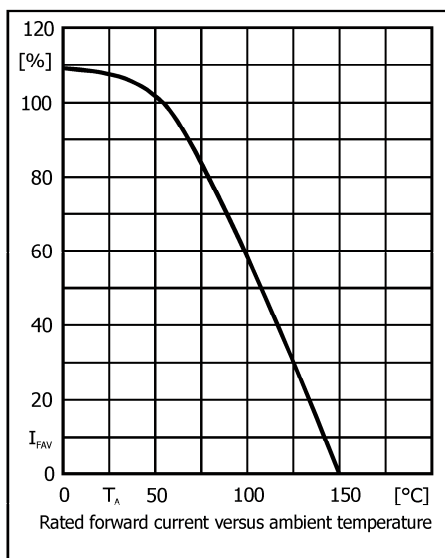


Dimensions in mm

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 $T_A = 55^\circ\text{C}$	I_{FAV}	2 ¹⁾		A
Repetitive Peak Forward Current at $f > 15\text{ Hz}$	I_{FRM}	10 ¹⁾		A
Peak Forward Surge Current, 50/60 Hz Half sine-wave at $T_A = 25^\circ\text{C}$	I_{FSM}	40/45		A
Maximum Forward Voltage at $T_j = 25^\circ\text{C}$, $I_F = 2\text{ A}$	V_F	1.2		V
Maximum Leakage Current $V_R = V_{RRM}$ $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ $T_j = 100^\circ\text{C}$	I_R	5 50		μA
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 $T_A = 25^\circ\text{C}$	i^2t	4.5		A^2s
Thermal Resistance Junction to Ambient Air	R_{thA}	45 ¹⁾		K/W
Operating Junction Temperature	T_j	- 50 to + 150		$^\circ\text{C}$
Storage Temperature	T_s	- 50 to + 175		$^\circ\text{C}$

¹⁾ 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

Dated : 14/02/2006 D