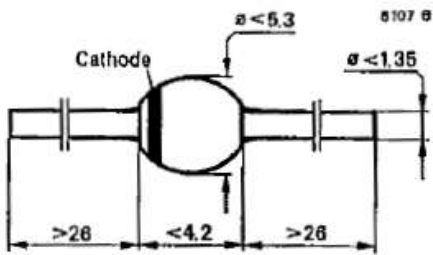


Silicon Mesa Diodes

Applications: Very fast rectifier and switch for example for switch mode power supply

Features:

- Glass passivated junction
- Hermetically sealed package
- Very fast recovery time
- Very low forward voltage
- Also available according to ESA - SCC 5000



Sintered glass case
Weight max. 0.4 g

Marking: By letters or color code according to TELEFUNKEN electronic

Absolute maximum ratings

		Cathode terminal	1. Color ring blue
Surge reverse voltage, repetitive peak reverse voltage			2. Color ring
BYV 61	$V_{RSM} = V_{RRM} = V_R$	50 V	brown
BYV 62	$V_{RSM} = V_{RRM} = V_R$	100 V	red
BYV 63	$V_{RSM} = V_{RRM} = V_R$	150 V	orange
Surge forward current $t_p = 10 \text{ ms}$	I_{FSM}	100	A
Repetitive peak forward current	I_{FRM}	30	A
Average forward current $I = 20 \text{ mm}, T_L \leq 25 \text{ }^\circ\text{C}$	Fig. 2, 3 I_{FAV} Fig. 4 I_{FAV}	2.75 6	A A
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature range	T_{stg}	- 65...+ 175	$^\circ\text{C}$

Maximum thermal resistance

Junction ambient $I = 20 \text{ mm}, T_L = \text{constant}$	Fig. 1	R_{thJA}	25	K/W
on PC board with spacing 37.5 mm	Fig. 2	R_{thJA}	65	K/W

BYV 61 · BYV 62 · BYV 63

Characteristics

$T_j = 25\text{ °C}$, unless otherwise specified

Forward voltage

$I_F = 6\text{ A}$

V_F

1.0 V

$I_F = 6\text{ A}, T_j = 100\text{ °C}$

V_F

0.85 V

Reverse current

$V_R = V_{RRM}$

I_R

5 μA

$V_R = V_{RRM}, T_j = 150\text{ °C}$

I_R

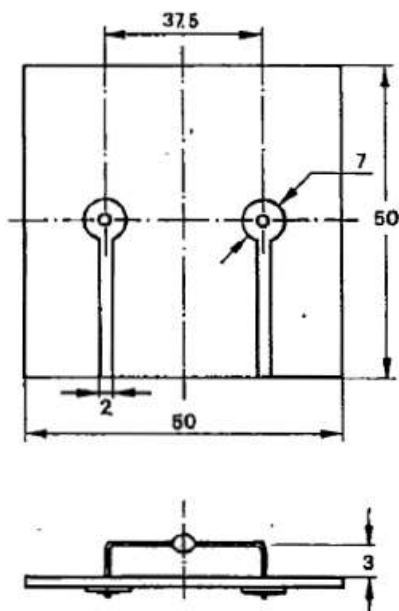
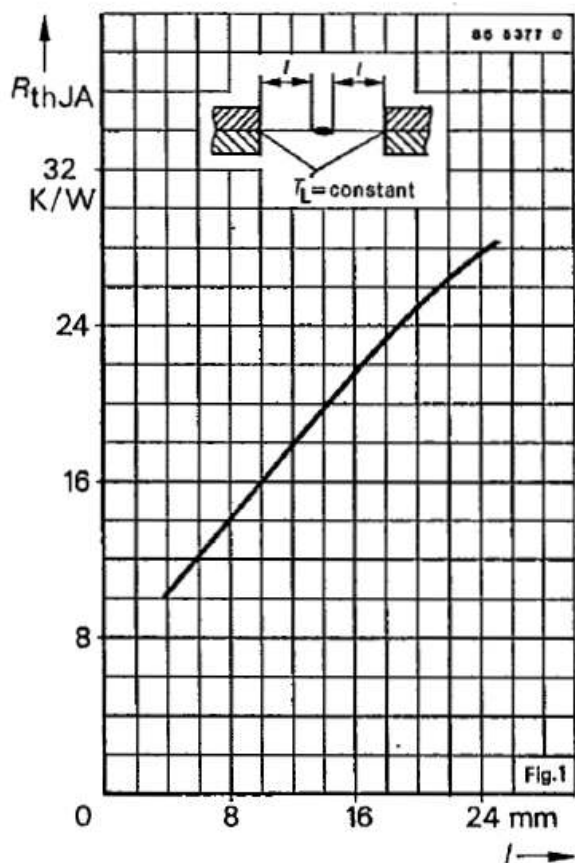
300 μA

Reverse recovery time

$I_F = 0.5\text{ A}, I_R = 1\text{ A}, I_R = 0.25\text{ A}$

t_{rr}

30 ns



Epoxy glass hard tissue, board thickness: 1.5 mm
 $R_{thJA} \leq 65\text{ K/W}$

Fig.2

BYV 61 · BYV 62 · BYV 63

