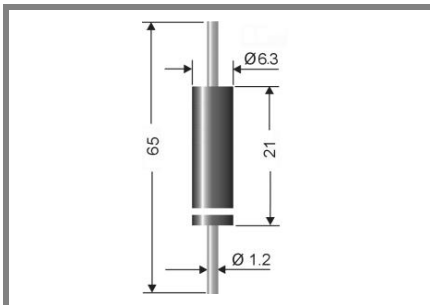# BV 8, BV 12, BV 16

Axial lead diode

High voltage silicon rectifier diodes

BV 8, BV 12, BV 16

Forward Current: 0,5 A

Reverse Voltage: 8000 to 16000 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0

Mechanical Data

- Plastic case 6,3 x 21 [mm]
- Weight approx.: 1,9 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 100 pieces per ammo

[1]) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

[2]) I_{FAV} = 500 mA, Tj = 25 °C

[3]) T_A = 25 °C

[4]) I_{FAV} = 300 mA, Tj = 25 °C

Type	Repetitive peak reverse voltage V_{RRM} V	Surge peak reverse voltage V_{RSM} V	Max. reverse recovery time I_F = - A I_R = - A I_{RR} = - A t_{rr} ns	Max. forward voltage V_F[2]
BV 8	8000	8000	-	8
BV 12	12000	12000	-	10
BV 16	16000	16000	-	15 [4])

Absolute Maximum Ratings	Tc = 25 °C, unless otherwise specified		
Symbol	**Conditions**	**Values**	**Units**
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C [1])	0,5	A
I_{FRM}	Repetitive peak forward current f > Hz[1])		A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave [3])	100	A
i^2t	Rating for fusing, t < 10 ms [3])	50	A²s
R_{thA}	Max. thermal resistance junction to ambient [1])	25	K/W
R_{thT}	Max. thermal resistance junction to terminals [1])		K/W
T_j	Operating junction temperature	-50...+150	°C
T_s	Storage temperature	-50...+150	°C

Characteristics	Tc = 25 °C, unless otherwise specified		
Symbol	**Conditions**	**Values**	**Units**
I_R	Maximum leakage current, T_j = 25 °C; V_R = V_{RRM}	<1	µA
	T_j = 100 °C; V_R = V_{RRM}	<25	µA
C_J	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
Q_{rr}	Reverse recovery charge (U_R = V; I_F = A; dI_F/dt = A/ms)	-	µC
E_{RSM}	Non repetitive peak reverse avalanche energy (I_R = mA; T_j = °C; inductive load switched off)	-	mJ

Dimensions in mm

case: 6,3 x 21 [mm]

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