



Silicon Press-fit diodes

Silicon Protectifiers with TVS characteristics
High-temperature diodes
BYZ 50A22 ... BYZ50K39

Pulse Power Dissipation: 10000 W

Maximum Stand-off voltage: / V

Publish Data

Features

- High power diodes
- High temperature diodes

Mechanical Data

- Metal press-fit case with plastic cover
- Casting compound has UL classification 94V-0
- Terminals - Ni plated
- Mounting position : any
- Weight approx. : 10 g
- Standard packing : Bulk
- BYZ50Axx - anode on wire
- BYZ50Kxx - cathode on wire

Absolute Maximum Ratings

Symbol	Conditions	Values	Units
P_{PPM}	Peak pulse power dissipation $t_p = 1\text{ms}$ $T_a = 25^\circ\text{C}$	10000	W
$P_{M(AV)}$	Steady state power dissipation ²⁾ , $T_a = ^\circ\text{C}$		W
I_{FSM}	Peak forward surge current 50Hz half sin wave, $T_A = 25^\circ\text{C}$ $T_a = ^\circ\text{C}$	360	A
R_{thA}	Max. thermal resistance junction to ambient ²⁾		K/W
R_{thT}	Max. thermal resistance junction to terminal	0,6	K/W
T_j	Operating junction temperature	-50 ... +225	$^\circ\text{C}$
T_s	Storage temperature	-50 ... +225	$^\circ\text{C}$
V_f	Max. instant. forw. voltage $I_f = 100\text{A}$ ³⁾	<1,1 (BYZ 50A(K)22; 26)	V
		<1,2 (BYZ 50A(K)32; 36; 39)	V

Type	Characteristics		Breakdown voltage@ I_T		Test current I_T mA	Max. clamping voltage@ I_{PPM}	
	Max stand-off voltage@ I_D V_{WM} V	I_D μA	min. V	max. V		V_C V	I_{PPM} A
BYZ 50A(K)22	16	10	20	25	100	35	100
BYZ 50A(K)27	20	10	25	29	100	40	100
BYZ 50A(K)33	26	10	31	35	100	50	80
BYZ 50A(K)37	30	10	34	40	100	56	80
BYZ 50A(K)39	32	10	35	43	100	58	60

