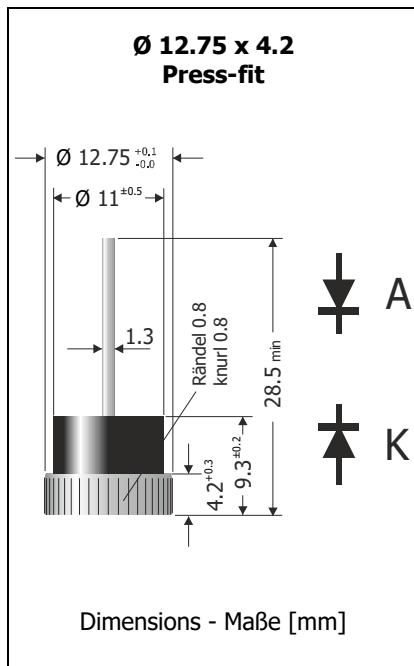


BYZ35A22 ... BYZ35A47 | BYZ35K22 ... BYZ35K47
Press-Fit Diodes – Protectifiers®
Einpress-Dioden – Protectifiers®
I_{FAV} = 35 A**V_F < 1.1 V****T_{jmax} = 200°C****V_{WM} = 17.8 ... 38.1 V****V_{BR} = 22 ... 47 V****I_{FSM} = 360/400 A**

Version 2019-05-27

**Typical Applications**
On-board alternators
Load dump protection
Commercial grade ¹⁾
Features
TVS (suppressor) characteristic
High junction temperature
Press-fit assembly into aluminum plate
Two polarity versions:
A = Anode to lead wire
K = Cathode to lead wire
Compliant to RoHS, REACH,
Conflict Minerals ¹⁾
**Mechanical Data ¹⁾**
Packed in cardboard trays 300
Weight approx. 10 g
Case material UL 94V-0
Solder & assembly conditions 260°C/10s
MSL N/A
Typische Anwendungen
Bordnetz-Generatoren
"Load dump"-Schutz
Standardausführung ¹⁾
Besonderheiten
TVS-(Begrenzer-)Charakteristik
Hohe Sperrschichttemperatur
Einpressmontage in Alu-Kühlblech
Zwei Polaritäten:
A = Anode am Anschlussdraht
K = Kathode am Anschlussdraht
Konform zu RoHS, REACH,
Konfliktmineralien ¹⁾
Mechanische Daten ¹⁾
Verpackt in Einlegekartons
Gewicht ca.
Gehäusematerial
Löt- und Einbaubedingungen
Maximum ratings ²⁾

Max. average forward current – Dauergrenzstrom	T _C = 150°C ³⁾	I _{FAV}	35 A
Repetitive peak forward current – Periodischer Spitzenstrom	f > 15 Hz T _C = 150°C ³⁾	I _{FRM}	72 A
Peak forward surge current Stoßstrom in Fluss-Richtung	Half sine-wave 50 Hz (10 ms) Sinus-Halbwelle 60 Hz (8.3 ms)	I _{FSM}	360 A 400 A
Rating for fusing – Grenzlastintegral	t < 10 ms	i ² t	600 A ² s
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T _j T _s	-50...+200°C -50...+200°C
Peak junction temperature in case of load dump Spitzensperrschichttemperatur im "Load dump" Fall	t < 400 ms	T _{JM}	+215°C
Maximum pressing force – Maximaler Einpressdruck		F _{PM}	4 kN

Grenzwerte ²⁾**Characteristics (T_j = 25°C)**

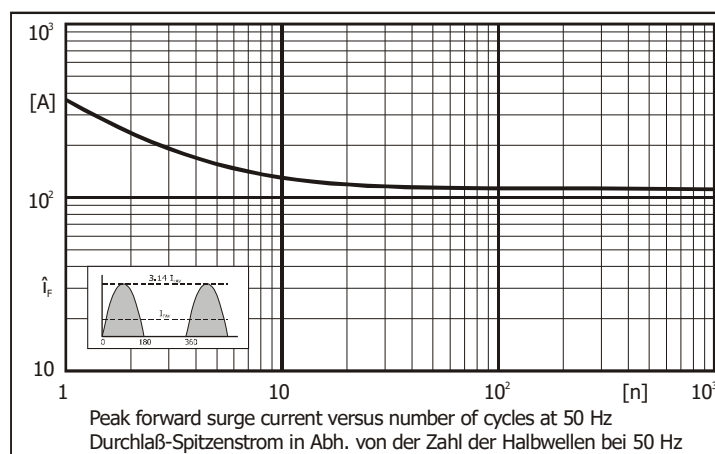
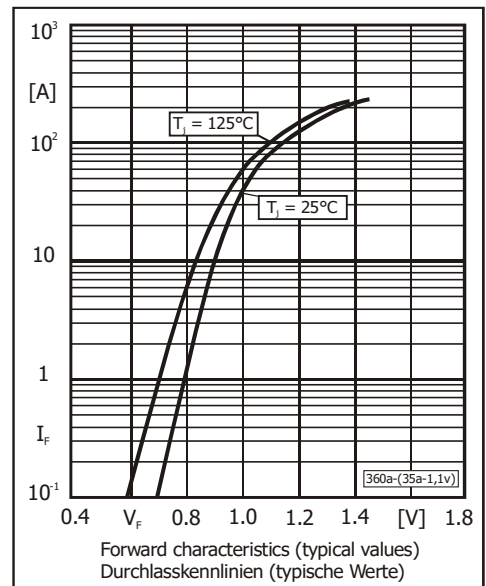
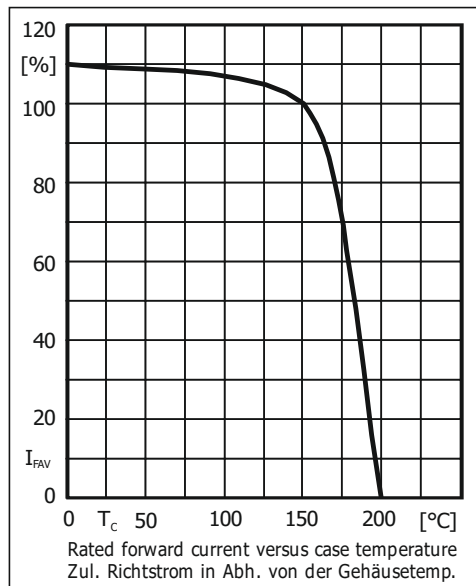
Type / Typ	Breakdown voltage Abbruchspannung I _T = 100 mA	Reverse voltage Sperrspannung I _R = 5 µA	Max. clamping voltage Max. Begrenzerspannung. at / bei I _{pp} , t _p = 1 ms
Wire to / Draht an			
Anode Cathode	V _{BRmin} [V] V _{BRmax} [V]	V _R [V]	V _C [V] I _{pp} [A]
BYZ35A22 BYZ35K22	19.8 24.2	> 17.8	31.9 157
BYZ35A27 BYZ35K27	24.3 29.7	> 21.8	39.1 128
BYZ35A33 BYZ35K33	29.7 36.3	> 26.8	47.7 105
BYZ35A39 BYZ35K39	35.1 42.9	> 31.6	56.4 89
BYZ35A47 BYZ35K47	42.3 51.7	> 38.1	67.8 74

Kennwerte (T_j = 25°C)

- Please note the [detailed information on our website](#) or at the beginning of the data book
Bitte beachten Sie die [detaillierten Hinweise auf unserer Internetseite](#) bzw. am Anfang des Datenbuches
- T_A = 25°C unless otherwise specified – T_A = 25°C wenn nicht anders angegeben
- Temperature measured at the metallic base – Temperatur am Metallssockel gemessen

Characteristics
Kennwerte

Forward voltage Durchlass-Spannung	$T_j = 25^\circ\text{C}$ $I_F = 35\text{ A}$	V_F	$< 1.1\text{ V}$
Typical junction capacitance Typische Sperrschichtkapazität	$V_R = 4\text{ V}$	C_j	430 pF
Reverse recovery time Sperrverzug	$I_F = 0.5\text{ A}$ through/über $I_R = 1\text{ A}$ to $I_R = 0.25\text{ A}$	t_{rr}	typ. 1500 ns
Typical thermal resistance junction to case Typischer Wärmewiderstand Sperrschicht – Gehäuse		R_{thC}	0.8 K/W ¹⁾



Disclaimer: See data book page 2 or [website](#)
Haftungsschluss: Siehe Datenbuch Seite 2 oder [Internet](#)

1 Temperature measured at the metallic base – Temperatur am Metallsockel gemessen