Diotec Semiconductor

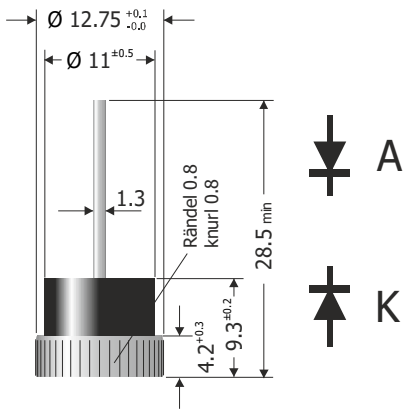
BYP60A05 ... BYP60A6 | BYP60K05 ... BYP60K6

Standard Recovery Press-fit Rectifier Diodes
Einpress-Gleichrichterdioden mit Standard-Sperrverzug

I_{FAV} = 60 A V_{RRM} = 50...600 V
V_F < 1.1 V I_{FSM} = 450/500 A
T_{jmax} = 200°C t_{rr} ~ 1500 ns

Version 2017-12-27

Ø 12.75 x 4.2
Press-fit



Dimensions - Maße [mm]

Typical Application
50/60 Hz Mains Rectification, Power Supplies, Polarity Protection
Commercial grade [1])

Typische Anwendung
50/60 Hz Netzgleichrichtung, Stromversorgungen, Verpolschutz
Standardausführung [1])

Features
High junction temperature
Two polarity versions:
A = Anode to lead wire
K = Cathode to lead wire
For press-fit assembly into aluminium cooling plate
Compliant to RoHS, REACH, Conflict Minerals [1])

Besonderheit
Hohe Sperrschichttemperatur
Zwei Polaritäten:
A = Anode am Anschlussdraht
K = Kathode am Anschlussdraht
Für Einpressmontage in Alu-Kühlblech
Konform zu RoHS, REACH, Konfliktmineralien [1])

Mechanical Data [1])		**Mechanische Daten [1])**
Packed in cardboard trays	300	Verpackt in Einlagekartons
Weight approx.	10 g	Gewicht ca.
Plastic material	UL 94V-0	Kunststoffmaterial
Solder & assembly conditions	260°C/10s MSL N/A	Löt- und Einbaubedingungen

Maximum ratings [2]) **Grenzwerte [2])**

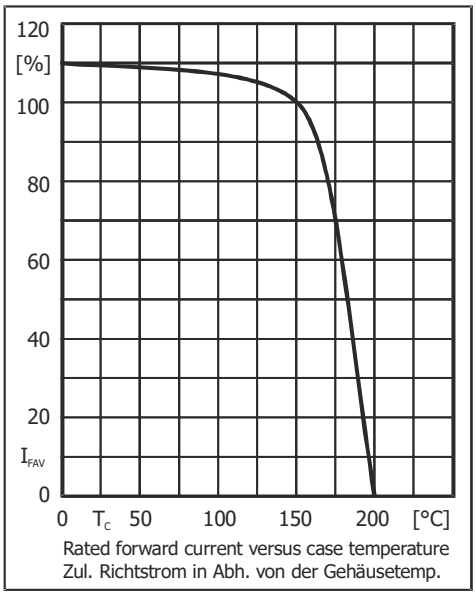
Type / Typ Wire to / Draht an Anode	Cathode	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]
BYP60A05	BYP60K05	50	50
BYP60A1	BYP60K1	100	100
BYP60A2	BYP60K2	200	200
BYP60A4	BYP60K4	400	400
BYP60A6	BYP60K6	600	600

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last		T_C = 150°C [3])	I_{FAV}	60 A
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	T_C = 150°C [3])	I_{FRM}	190 A
Peak forward surge current Stoßstrom in Fluss-Richtung	Half sine-wave Sinus-Halbwelle	50 Hz (10 ms) 60 Hz (8.3 ms)	I_{FSM}	450 A 500 A
Rating for fusing Grenzlastintegral		t < 10 ms	i^2t	1000 A^2s
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur			T_j T_S	-50...+200°C -50...+200°C
Maximum admissible press-in force Maximal zulässige Einpresskraft			F_{pM}	4 kN

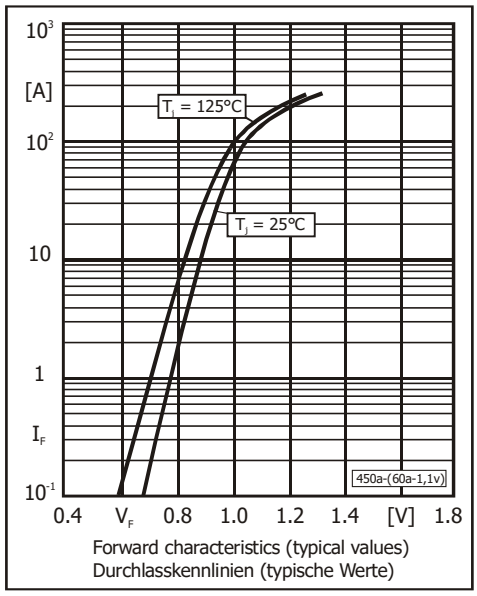
1 Please note the detailed information on our website or at the beginning of the data book
Bitte beachten Sie die detaillierten Hinweise auf unserer Internetseite bzw. am Anfang des Datenbuches
2 T_A = 25°C unless otherwise specified – T_A = 25°C wenn nicht anders angegeben
3 Temperature measured at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

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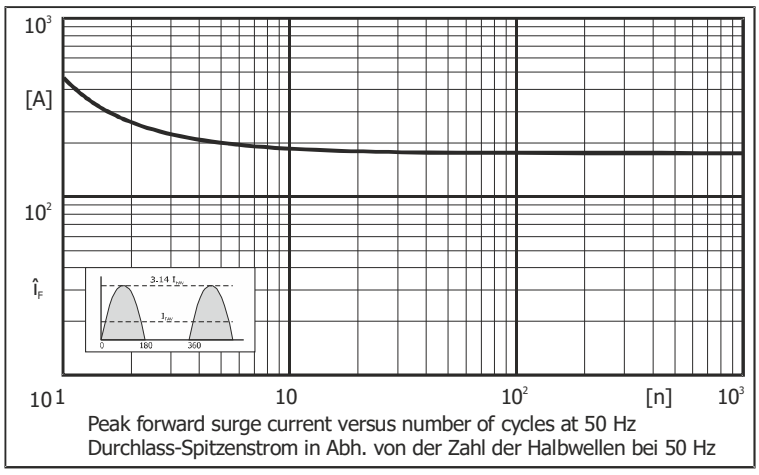
Characteristics				**Kennwerte**
Forward voltage Durchlass-Spannung	T_j = 25°C	I_F = 60 A	V_F	< 1.1 V
Leakage current Sperrstrom	T_j = 25°C	$V_R = V_{RRM}$	I_R	< 100 µA
Typical junction capacitance Typische Sperrschichtkapzität		V_R = 4 V	C_j	430 pF
Reverse recovery time Sperrverzug	I_F = 0.5 A through/über I_R = 1 A to I_R = 0.25 A		t_{rr}	typ. 1500 ns
Thermal resistance junction to metallic base Wärmewiderstand Sperrschicht – Metallsockel			R_{thC}	< 0.6 K/W [1])



Rated forward current versus case temperature
Zul. Richtstrom in Abh. von der Gehäusetemp.



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



Peak forward surge current versus number of cycles at 50 Hz
Durchlass-Spitzenstrom in Abh. von der Zahl der Halbwellen bei 50 Hz

Disclaimer: See data book page 2 or website
Haftungssauschluss: Siehe Datenbuch Seite 2 oder oder Internet

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

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