

Diotec Products for TV-Applications



„Clamper/Damper“ Diodes
Horizontal Deflection
East-West Correction etc

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Standard Rectifier
(Ultra-)Fast Rectifier
High Voltage Rectifier

Input Rectification

>

Bridge Rectifier

Output Rectification

>

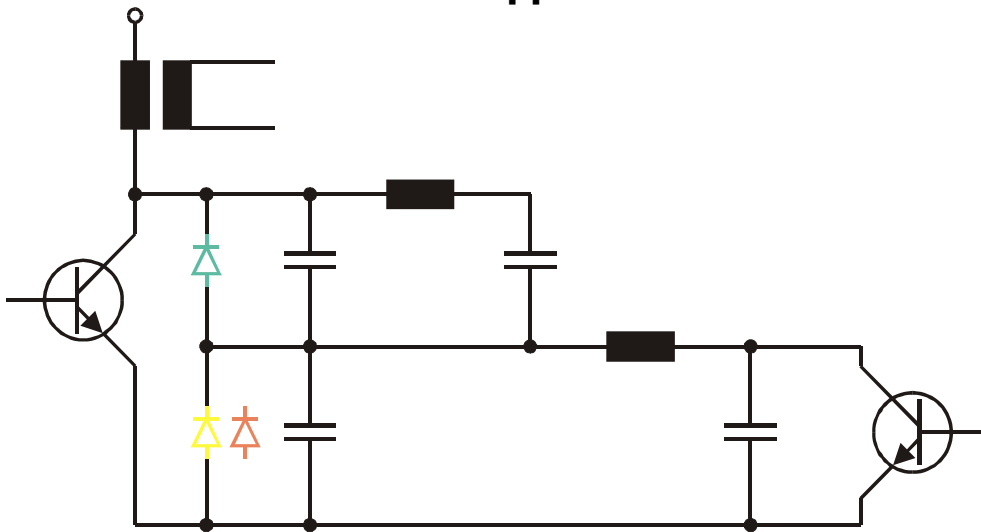
(Ultra-)Fast Rectifier
Schottky Rectifier

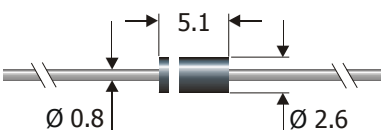
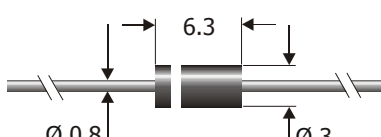
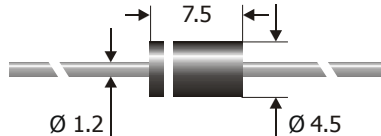
Signal Processing

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Small Signal Diodes
Schottky Diodes
Zener Diodes
Transistors

„Clamper/Damper“ Diodes for Horizontal Deflection, East-West Correction and similar applications

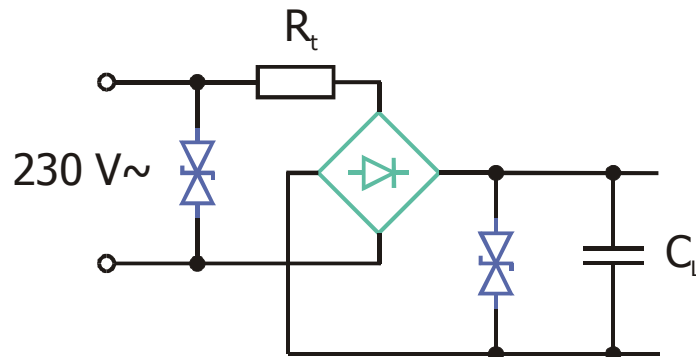


Industry Part #	Diotec Part # ¹⁾²⁾	I _{FAV} [A]	V _{RRM} [V]	t _{rr} [ns]	Package – Gehäuse
RH2D, ERB06-13 CGP/DGP15, RH2F RH10F, ERB06-15	1N4007-1300 BY133 EM513 EM516/518	1.0	1300 1600 1.8/2 kV	typ. 1500	 DO-41/DO-204AL
BYW32/36 BYV95B BYV36 C/E	1N4935/37 BYV95BP BYV36 CP/EP	1.0	200/600 400 600/1000	<200 <300 <50	
1N5062 CGP20, DGP20, BY228	1N5062P BY228G	2.0 3.0	800 1600	typ. 1500	
BYV97G BYV27-200	BYV97GP BYV27-200P	1.0 2.0	1400 400	<500 <35	 DO-15/DO-204AC
BYM56E ERC/ERD07-13 CGP/DGP30, RH3F, RH3G, RS3FS, ERC/ERD07-15 BY448	BYM56EP BY255 BY1600 BY1800, BY2000	3.0	1000 1300 1600 1.8/2 kV	typ. 1500	
BYW95 B/C BYV28-200 BYV98-200	BYW95 BP/CP BYV28-200P	3.0	400/600 200	<250 <30	 ~DO-201

1 Datasheets see <http://www.diotec.com/> - „Products“ or contact Diotec

2 Nearest Equivalent

Input Rectification



TVS Diodes

AC side: protect the whole unit against voltage spikes from the mains, caused by lightning, electrostatic discharge (ESD), fast switching transients, etc.

DC side: protect the rectifier bridge against voltage spikes caused by fast switching transients of the following inverter stage

Dimensioning: the maximum occurring peak input voltage resp. the DC voltage must not exceed the stand-off voltage of the device; it may be necessary to switch devices in series to achieve higher voltage rating.

Types¹

Leaded: BZW04-..., P4KE..., BZW06-..., P6KE..., 1.5KE... , 5KP...; (400 bis 5000 W)

SMD: TGL34-... , TGL41..., P4SMAJ..., P6SMBJ..., 1.5SMCJ... ; (150 bis 1500 W)

Bridge Rectifier

Available as complete device but can also be formed by four single devices. Recommended values for protective resistor R_t and load capacitor C_L are given within the datasheet. R_t includes also series resistance of transformer and leads, at small powers an additional device is therefore often not necessary.

Types¹

Medium Power (1.5 to 25 A)

Single Inline:

B..C1500, B..C2300-1500; B..C3200-2200 to B..C7000-4000; GBS 4; GBU 4...12; GBI 10...25

Square, Wire Leads:

KBPC600, KBPC800, PB1000, PB1000S

High Power (10 to 50 A)

Square, Fast-on Connectors:

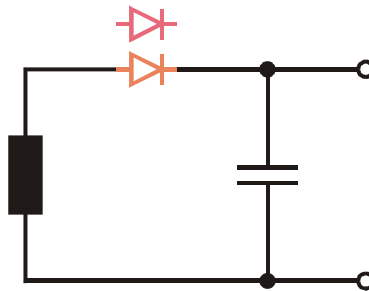
KBPC1000FP, KBPC1500FP to KBPC5000FP

Square, Wire Leads:

KBPC1000WP, KBPC1500WP to KBPC5000WP, KBPC2500I to KBPC3500I

¹ Datasheets see <http://www.diotec.com> - "Products"

Output Rectification



Ultrasfast Rectifier, Schottky Diodes¹

Leaded:

UF4001...7, UF5400...8, UF600...; (1 to 6 A)

SB120...1100, SB220...2100, SB320...3100, SB520...5100; SB820...8100 (1 to 8 A)

SMD:

EGL34..., EGL1..., SUF4001...7, US1..., US2..., US3...; (0.5 to 3 A)

SMS120...1100, SMS220...2100, SMS320...3100, SK12...110, SK32...310SMA, SK52...510, SK82...810; (1 to 8 A)

Signal Processing

Small Signal Diodes, Schottky Diodes, Zener-Diodes¹

Leaded:

1N4148...1N4151; BAV18...BAV21; SD101, SD103; ZPD..

SMD:

LL4148...LL4151, BAW56, BAV70, BAV99, BAV100...BAV103; LL101, LL103, BAS40, BAS70; ZMM.., BZX84C..

Bipolar Transistors¹

Leaded:

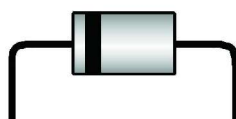
BC327ff, BC546ff, MPSA05/06; MPSA55/66; MPSA42/43, MPSA92/93

SMD:

BC807ff; MMBTA05/06, MMBTA55/56; MMBTA42/43, MMBTA92/93

Customer specific solutions

Axial leaded diodes can be delivered with lead wires bent in various ways, please contact Diotec or your local Diotec distributor.



¹ Datasheets see <http://www.diotec.com> - "Products"