

Fast high-voltage soft-recovery rectifiers

BY8400 series

FEATURES

- Glass passivated
- High maximum operating temperature
- Low leakage current
- Excellent stability
- Soft-recovery switching characteristics
- Compact construction.

APPLICATIONS

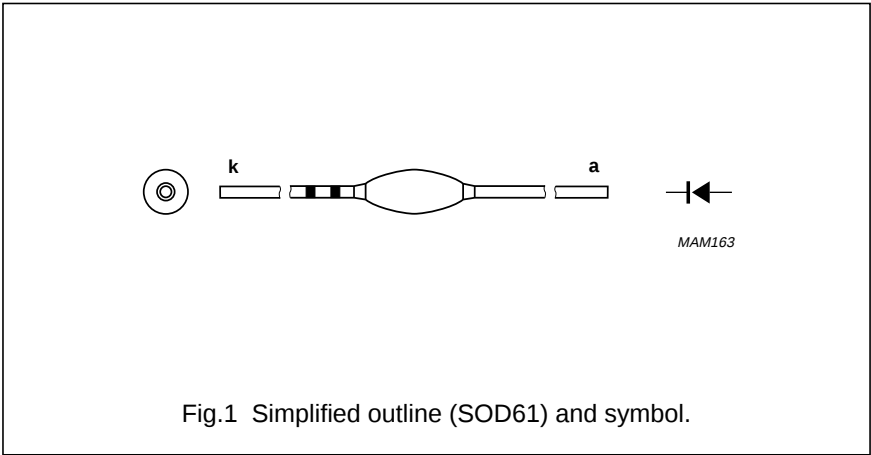
- For colour television and monitors up to 25 kHz
- High-voltage applications for:
 - Multipliers
 - Slot-wound diode-split-transformers.

DESCRIPTION

Rugged glass package, using a high temperature alloyed construction.

This package is hermetically sealed and fatigue free as coefficients of expansion of all used parts are matched.

The package is designed to be used in an insulating medium such as resin, oil or SF6 gas.



MARKING

Cathode band colour codes

TYPE NUMBER	PACKAGE CODE	INNER BAND	OUTER BAND
BY8404	SOD61AB	black	black
BY8406	SOD61AC	black	green
BY8408	SOD61AD	black	red
BY8410	SOD61AE	black	violet
BY8412	SOD61AF	black	orange
BY8414	SOD61AG	black	lilac
BY8416	SOD61AH	black	grey
BY8418	SOD61AI	black	brown
BY8420	SOD61AJ	black	dark blue
BY8424	SOD61AK	black	no band

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LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 134).

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
V_{RSM}	non-repetitive peak reverse voltage				
	BY8404		—	5	kV
	BY8406		—	8	kV
	BY8408		—	10	kV
	BY8410		—	12	kV
	BY8412		—	14	kV
	BY8414		—	17	kV
	BY8416		—	19	kV
	BY8418		—	22	kV
	BY8420		—	24	kV
	BY8424		—	30	kV
V_{RRM}	repetitive peak reverse voltage				
	BY8404		—	5	kV
	BY8406		—	8	kV
	BY8408		—	10	kV
	BY8410		—	12	kV
	BY8412		—	14	kV
	BY8414		—	17	kV
	BY8416		—	19	kV
	BY8418		—	22	kV
	BY8420		—	24	kV
	BY8424		—	30	kV
V_{RW}	working reverse voltage				
	BY8404		—	4	kV
	BY8406		—	6	kV
	BY8408		—	8	kV
	BY8410		—	10	kV
	BY8412		—	12	kV
	BY8414		—	14	kV
	BY8416		—	16	kV
	BY8418		—	18	kV
	BY8420		—	20	kV
	BY8424		—	24	kV

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SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$I_{F(AV)}$	average forward current	averaged over any 20 ms period; see Figs 2 to 11	—	20	mA
	BY8404		—	10	mA
	BY8406		—	5	mA
	BY8408		—	5	mA
	BY8410		—	5	mA
	BY8412		—	5	mA
	BY8414		—	5	mA
	BY8416		—	3	mA
	BY8418		—	3	mA
	BY8420		—	3	mA
	BY8424		—	3	mA
I_{FRM}	repetitive peak forward current	note 1	—	500	mA
T_{stg}	storage temperature		−65	+120	°C
T_j	junction temperature		−65	+120	°C

Note

1. Withstands peak currents during flash-over in a picture tube.