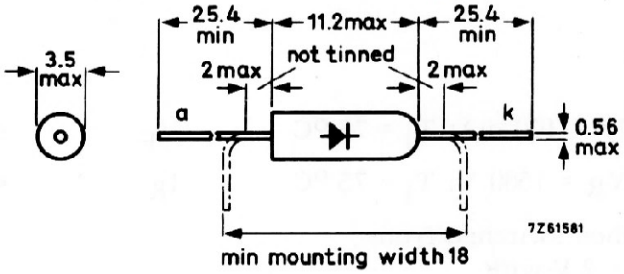
SILICON HIGH VOLTAGE DIODE

Diode in a plastic envelope intended for use as V_{g2} supply in colour television receivers.

QUICK REFERENCE DATA				
Crest working reverse voltage	V_{RWM}	max.	1500	V
Repetitive peak reverse voltage	V_{RRM}	max.	1800	V
Average forward current	I_{FAV}	max.	2.0	mA
Repetitive peak forward current	I_{FRM}	max.	100	mA
Junction temperature	T_j	max.	75	°C
Recovered charge when switched from I_F = 10 mA to V_R = 2 V with $-\frac{dI}{dt}$ = 5 mA/μs	Q_s	typ.	1	nC

MECHANICAL DATA www.datasheetcatalog.com Dimensions in mm



The envelope fulfils the accelerated damp heat test described in I.E.C. publication 68-2 (test D, severity IV, 6 cycles).

RATINGS Limiting values in accordance with the Absolute Maximum System (IEC 134)

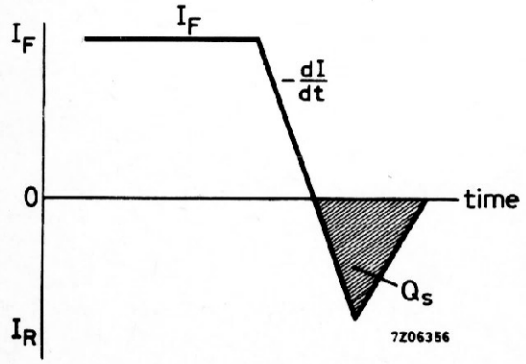
Voltages				
Crest working reverse voltage	V_{RWM}	max.	1500	V
Repetitive peak reverse voltage	V_{RRM}	max.	1800	V
Non repetitive peak reverse voltage ($t \leq 10$ ms)	V_{RSM}	max.	1800	V
Currents				
Average forward current (averaged over any 20 ms period)	I_{FAV}	max.	2.0	mA
Repetitive peak forward current	I_{FRM}	max.	100	mA
Non repetitive peak forward current ($t \leq 10$ ms)	I_{FSM}	max.	1000	mA
Temperatures				
Storage temperature	T_{stg}		−65 to +100	°C
Junction temperature	T_j	max.	75	°C

THERMAL RESISTANCE

From junction to ambient in free air	$R_{th\ j\text{-}a}$	=	175	°C/W

CHARACTERISTICS

Forward voltage at I_F = 100 mA; T_j = 75 °C	V_F	<	5	V
Reverse current at V_R = 1500 V; T_j = 75 °C	I_R	<	10	μA
Recovered charge when switched from I_F = 10 mA to V_R = 2 V with $-\frac{dI}{dt}$ = 5 mA/μs; T_j = 25 °C	Q_s	typ.	1	nC



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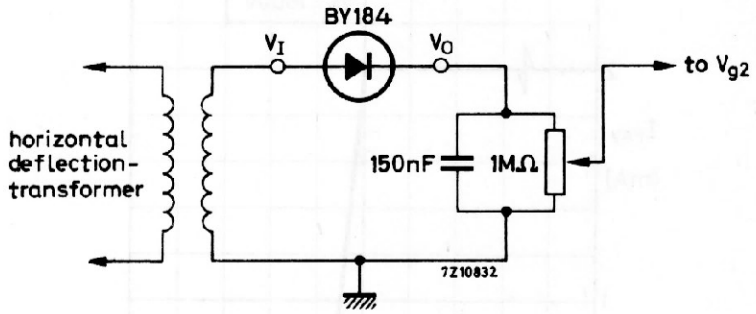
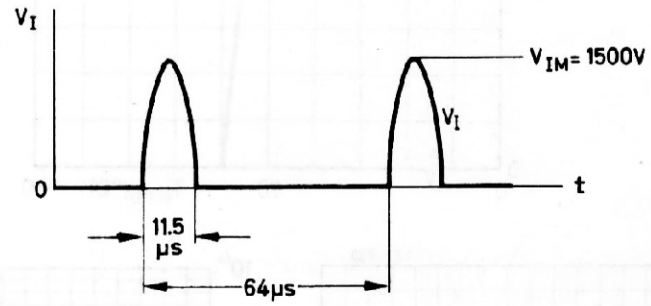
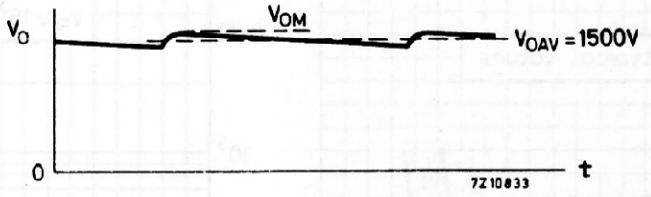
APPLICATION INFORMATION

Basic circuit for V_{g2} supply in colour television receivers.

Stable continuous operation is ensured at an ambient temperature up to 70 °C







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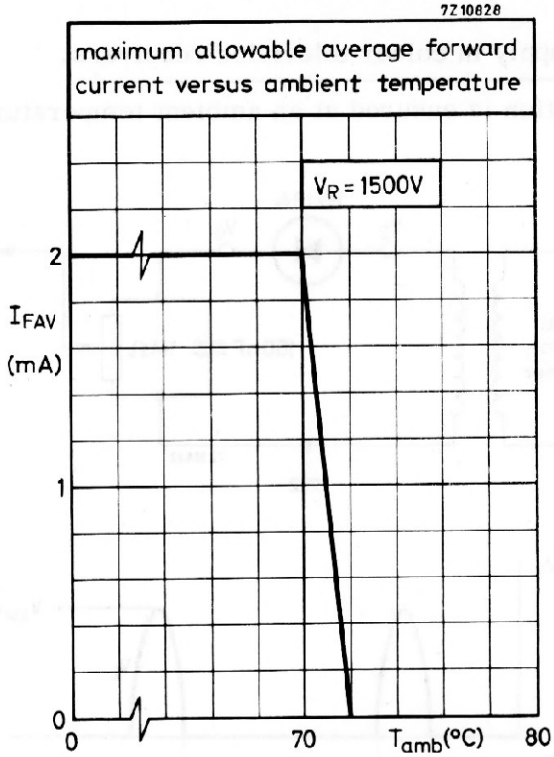
maximum allowable average forward current versus ambient temperature



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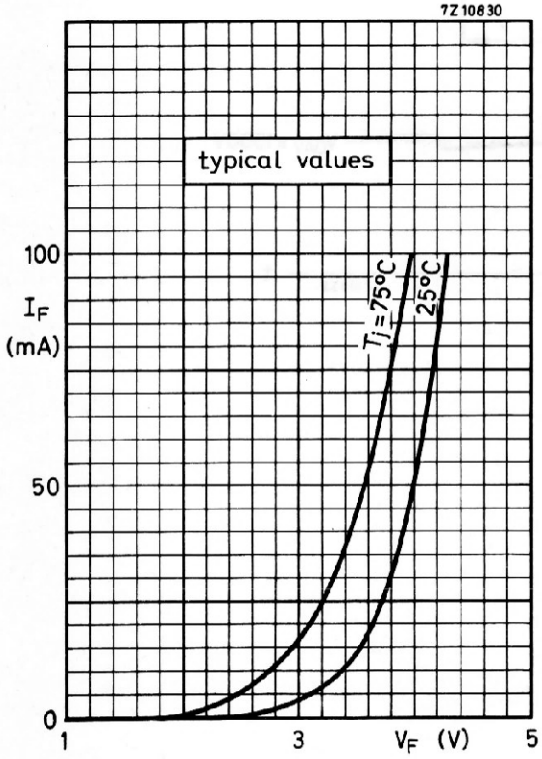
typical values



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