

LOW VOLTAGE STABISTOR



Silicon planar epitaxial diode in DO-35 envelope. This diode is intended for low voltage stabilizing e.g. bias stabilizer in class-B output stages, clipping, clamping and meter protection.

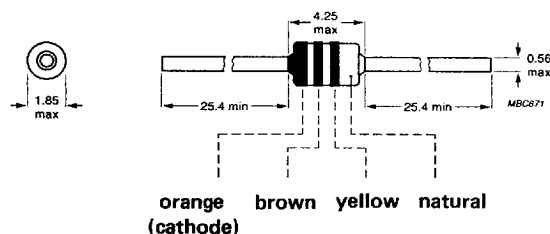
QUICK REFERENCE DATA

Repetitive peak forward current	I_{FRM}	max.	250 mA
Storage temperature	T_{stg}		-65 to +200 °C
Junction temperature	T_j	max.	200 °C
Thermal resistance from junction to ambient	$R_{th\ j-a}$	=	0,38 K/mW
Forward voltage			
$I_F = 0,1$ mA	V_F		610 to 690 mV
$I_F = 1,0$ mA	V_F		680 to 760 mV
$I_F = 10$ mA	V_F		750 to 830 mV
$I_F = 100$ mA	V_F		850 to 940 mV
Diode capacitance			
$V_R = 0$; $f = 1$ MHz	C_d	<	140 pF

MECHANICAL DATA

Dimensions in mm

Fig. 1 DO-35 (SOD-27).



Diodes may be either type-branded or colour-coded.

Products approved to CECC 50 001-026.

RATINGS

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

Repetitive peak forward current	I_{FRM}	max.	250 mA
Storage temperature	T_{stg}	-65 to + 200 °C	
Junction temperature	T_j	max.	200 °C

THERMAL RESISTANCE

From junction to ambient in free air	$R_{th j-a}$	=	0,38 K/mW
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CHARACTERISTICS

$T_j = 25\text{ °C}$ unless otherwise specified

Forward voltage

$I_F = 0,1\text{ mA}$

$I_F = 1,0\text{ mA}$

$I_F = 5,0\text{ mA}$

$I_F = 10\text{ mA}$

$I_F = 100\text{ mA}$

V_F 610 to 690 mV

V_F 680 to 760 mV

V_F 730 to 810 mV

V_F 750 to 830 mV

V_F 850 to 940 mV

Reverse current

$V_R = 4\text{ V}$

I_R < 5 μA

Temperature coefficient

$I_F = 1\text{ mA}$

S_F typ. -1,8 mV/K

Differential resistance at $f = 1\text{ kHz}$

$I_F = 1\text{ mA}$

r_{diff} typ. 30 Ω

$I_F = 10\text{ mA}$

r_{diff} typ. 3,5 Ω
< 6,0 Ω

Diode capacitance

$V_R = 0; f = 1\text{ MHz}$

C_d < 140 pF

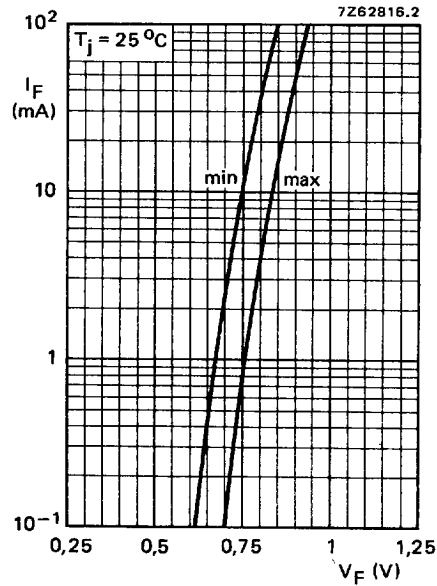


Fig. 2.