

Z-Diode

BZY85/C4V7

4,7V / 400mW

DATASHEET

OEM – Telefunken

Source: Telefunken Databook 1971/72

BZY 85/B... / BZY 85/C...

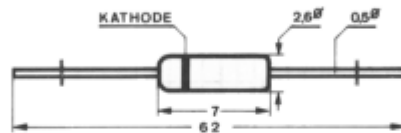
Silizium-Z-Dioden für die Erzeugung stabilisierter Bezugsspannungen und zur Spannungsstabilisierung bei kleinen Z-Strömen.

Silicon Z-diodes for stabilizing voltages and generating reference voltages.

Abmessungen · Dimensions

Maße in mm

M 2:1



Normgehäuse
JEDEC DO 7
Gewicht · Weight
max. 0,3 g

Absolute Grenzdaten · Absolute maximum ratings

Z-Strom	I_Z	P_V/U_Z	
Z-Spitzenstrom	i_{ZM}	250	mA
Durchlaßspitzenstrom	I_{FM}	300	mA
Verlustleistung	P_V	400	mW
$t_{amb} \leq 25^\circ\text{C}$			
Sperrschichttemperatur	t_j	+150	$^\circ\text{C}$
Lagerungstemperatur	t_{stg}	-55... +125	$^\circ\text{C}$

BZY 85/B... / BZY 85/C... / BZY 85/D...

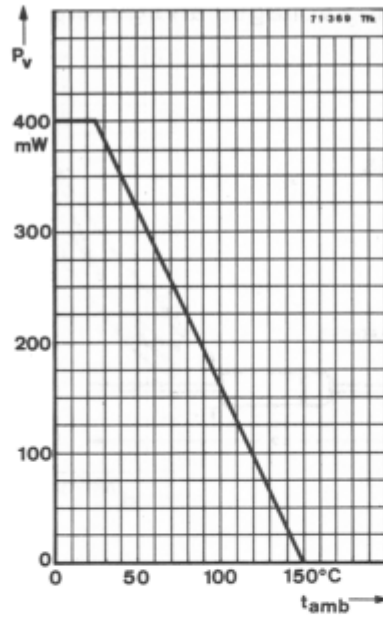
Wärmewiderstand · Thermal resistance

Sperrschicht-Umgebung

R_{thJA}

≤ 310

$^{\circ}\text{C/W}$



Kenngrößen · Characteristics

Umgebungstemperatur $t_{amb} = 25^{\circ}\text{C}$

Durchlaßspannung

$U_F^*)$

Min. Typ. Max.

0,8 1 V

$I_F = 100\text{ mA}$

Sperrstrom

$U_R = 1\text{ V}$

BZY 85/B 6 V 8...33

$I_R^*)$

100 nA

BZY 85/C 6 V 8...33

$I_R^*)$

100 nA

BZY 85/D 6 V 8...22

$I_R^*)$

100 nA

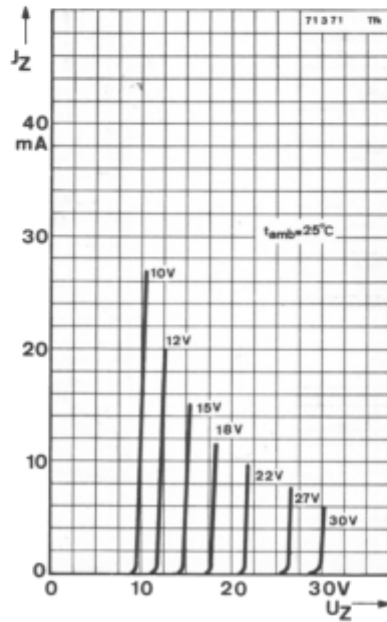
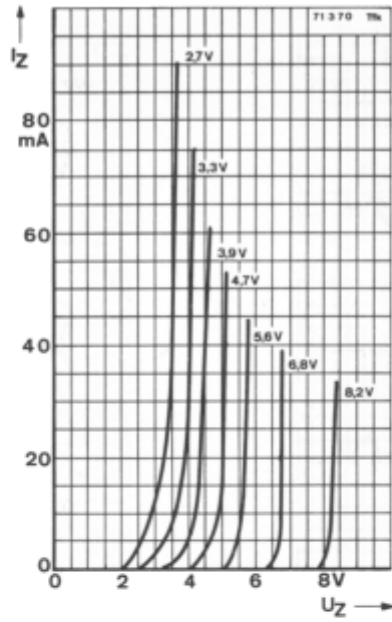
*) AQL = 0,65%

BZY 85/B... / BZY 85/C... / BZY 85/D...

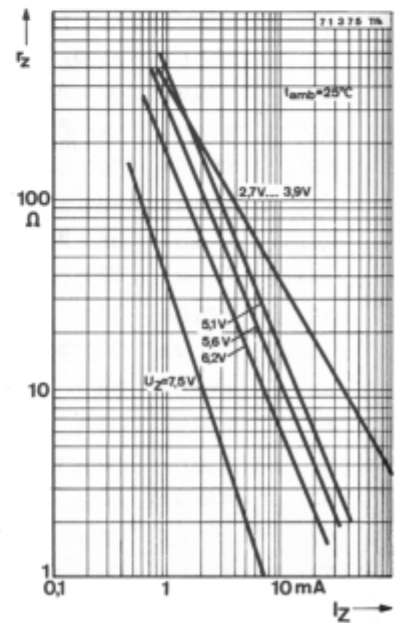
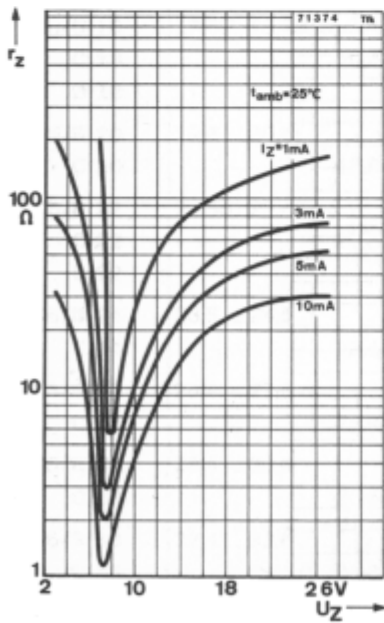
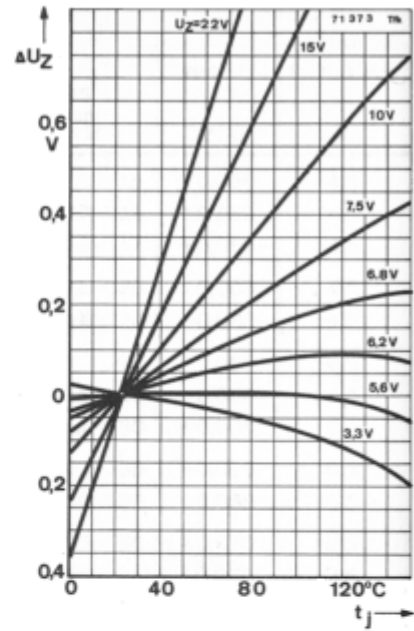
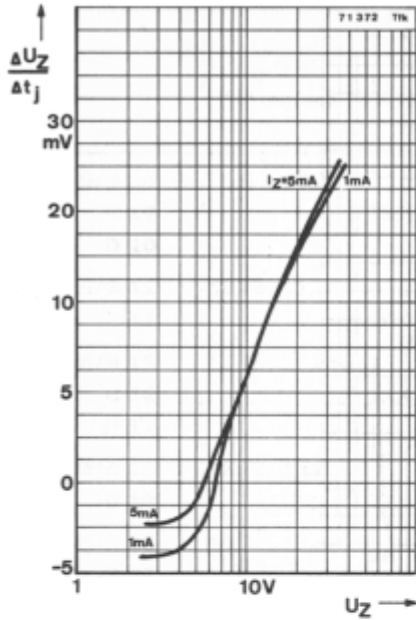
Typ	$I_Z = 5 \text{ mA}$			$r_{z1}^*)$ Ω	TK von U_Z %/°C	$U_{Rmin}^*)$ $I_R = 1 \mu\text{A}$ V
	$U_Z^*)^{1)}$ 2% Toleranz V	$U_Z^*)^{1)}$ 5% Toleranz V	$U_Z^*)^{1)}$ 10% Toleranz V			
BZY 85/B 2 V 7	2,64... 2,76			70 < 80	-0,075	-
C 2 V 7		2,5... 2,9		70 < 80	-0,075	-
BZY 85/B 3	2,94... 3,06			70 < 80	-0,07	-
C 3		2,8... 3,2		70 < 80	-0,07	-
BZY 85/B 3 V 3	3,24... 3,36			70 < 80	-0,065	-
C 3 V 3		3,1... 3,5		70 < 80	-0,065	-
BZY 85/B 3 V 6	3,52... 3,68			70 < 80	-0,06	-
C 3 V 6		3,4... 3,8		70 < 80	-0,06	-
BZY 85/B 3 V 9	3,82... 3,98			60 < 80	-0,055	-
C 3 V 9		3,7... 4,1		60 < 80	-0,055	-
BZY 85/B 4 V 3	4,22... 4,38			55 < 75	-0,045	-
C 4 V 3		4,0... 4,6		55 < 75	-0,045	-
BZY 85/B 4 V 7	4,6 ... 4,8			50 < 70	-0,035	1 ²⁾
C 4 V 7		4,4... 5,0		50 < 70	-0,035	1 ²⁾
D 4 V 7			4,1... 5,2	50 < 80	-0,035	-
BZY 85/B 5 V 1	5,0 ... 5,2			43 < 65	-0,025	1 ²⁾
C 5 V 1		4,8... 5,4		43 < 65	-0,025	1 ²⁾
BZY 85/B 5 V 6	5,48... 5,72			32 < 55	-0,003	1 ²⁾
C 5 V 6		5,2... 6,0		32 < 55	-0,003	1 ²⁾
D 5 V 6			5,0... 6,3	32 < 60	-0,003	-
BZY 85/B 6 V 2	6,08... 6,32			16 < 35	+0,015	1 ²⁾
C 6 V 2		5,8... 6,6		16 < 35	+0,015	1 ²⁾
BZY 85/B 6 V 8	6,66... 6,94			4,5 < 8	+0,03	1,5
C 6 V 8		6,4... 7,2		4,5 < 8	+0,03	1,5
D 6 V 8			6,0... 7,5	4,5 < 18	+0,03	1,5
BZY 85/B 7 V 5	7,35... 7,65			2,0 < 7	+0,04	1,5
C 7 V 5		7,0... 7,9		2,0 < 7	+0,04	1,5
BZY 85/B 8 V 2	8,04... 8,36			2,8 < 7	+0,047	3
C 8 V 2		7,7... 8,7		2,8 < 7	+0,047	3
D 8 V 2			7,3... 9,2	2,8 < 8	+0,047	3
BZY 85/B 9 V 1	8,92... 9,28			4,7 < 10	+0,054	3
C 9 V 1		8,5... 9,6		4,7 < 10	+0,054	3

*) AQL = 0,65%, 1) impulsmäßig gemessen: $\frac{t_p}{T} = 0,01$, $t_p \leq 100 \text{ ms}$, 2) bei $I_R = 0,5 \mu\text{A}$

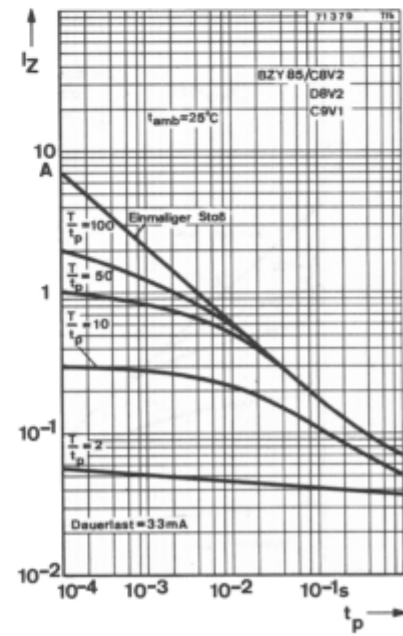
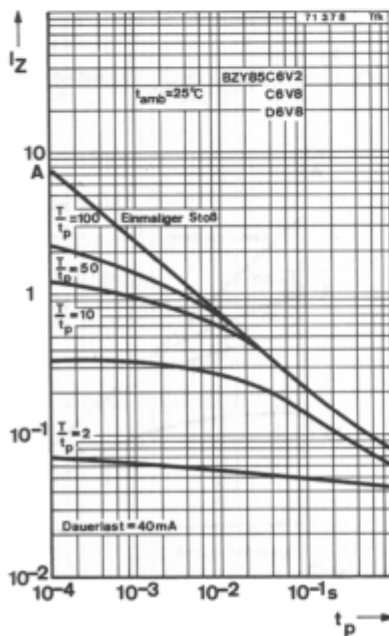
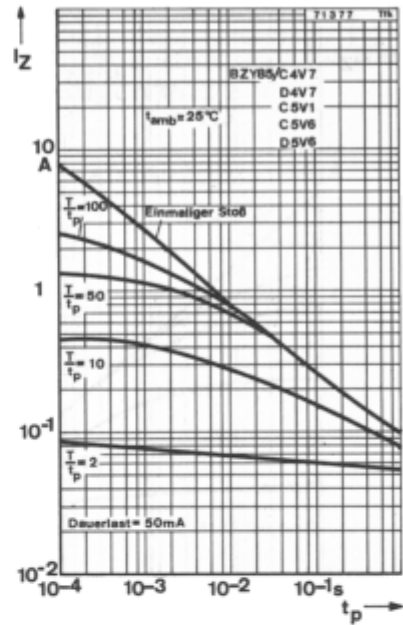
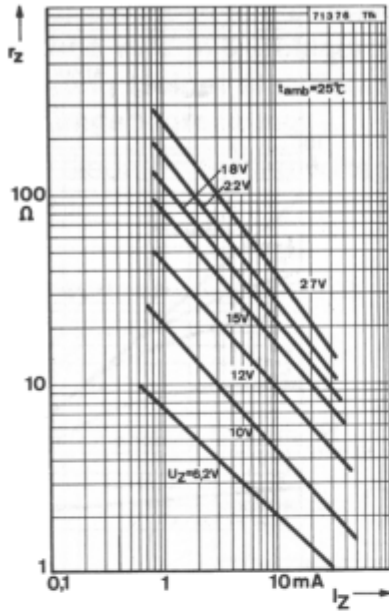
BZY 85/B... / BZY 85/C... / BZY 85/D...



BZY 85/B... / BZY 85/C... / BZY 85/D...



BZY 85/B... / BZY 85/C... / BZY 85/D...



BZY 85/B... / BZY 85/C... / BZY 85/D...

