POINT CONTACT DIODE

Germanium diode in all-glass DO-7 envelope intended for general purposes.

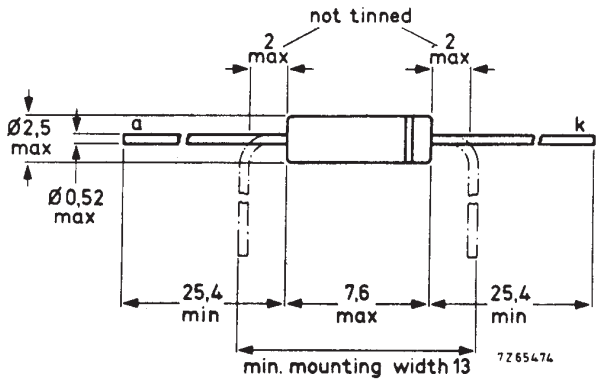
QUICK REFERENCE DATA

Continuous reverse voltage	V_R	max.	90 V
Repetitive peak reverse voltage	V_{RRM}	max.	115 V
Forward current (d.c.)	I_F	max.	50 mA
Repetitive peak forward current	I_{FRM}	max.	150 mA
Operating ambient temperature	T_{amb}	max.	75 °C
Forward voltage at I_F = 30 mA	V_F	<	3,3 V

MECHANICAL DATA

Dimensions in mm

Fig. 1 DO-7.



The diodes may be supplied either type-branded or with a broad *red* cathode band.

Available for current production only; not recommended for new designs.

RATINGS

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

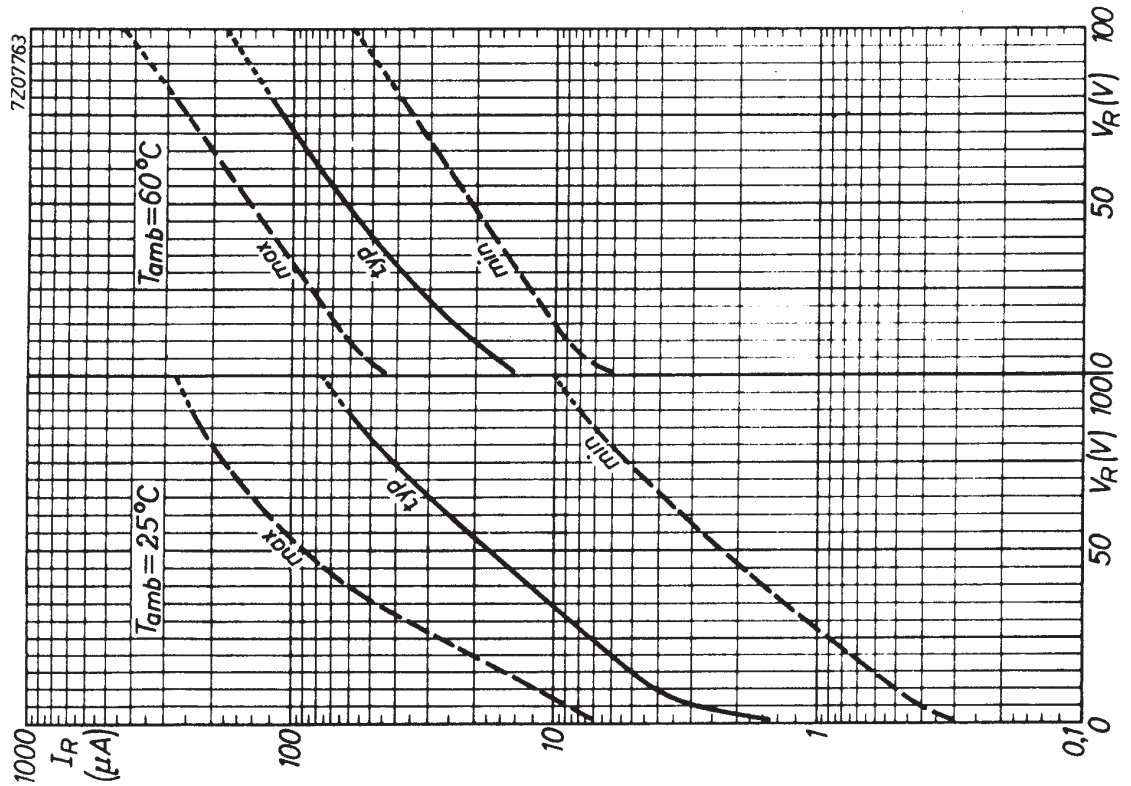
Average reverse voltage (averaged over any 50 ms period)	V_R	max. 90 V
Repetitive peak reverse voltage	V_{RRM}	max. 115 V
Average forward current (averaged over any 50 ms period)	$I_{F(AV)}$	max. 50 mA
Repetitive peak forward current	I_{FRM}	max. 150 mA
Non-repetitive peak forward current ($t < 1$ s)	I_{FSM}	max. 500 mA
Storage temperature	T_{stg}	−65 to +75 °C
Ambient temperature	T_{amb}	−55 to +75 °C

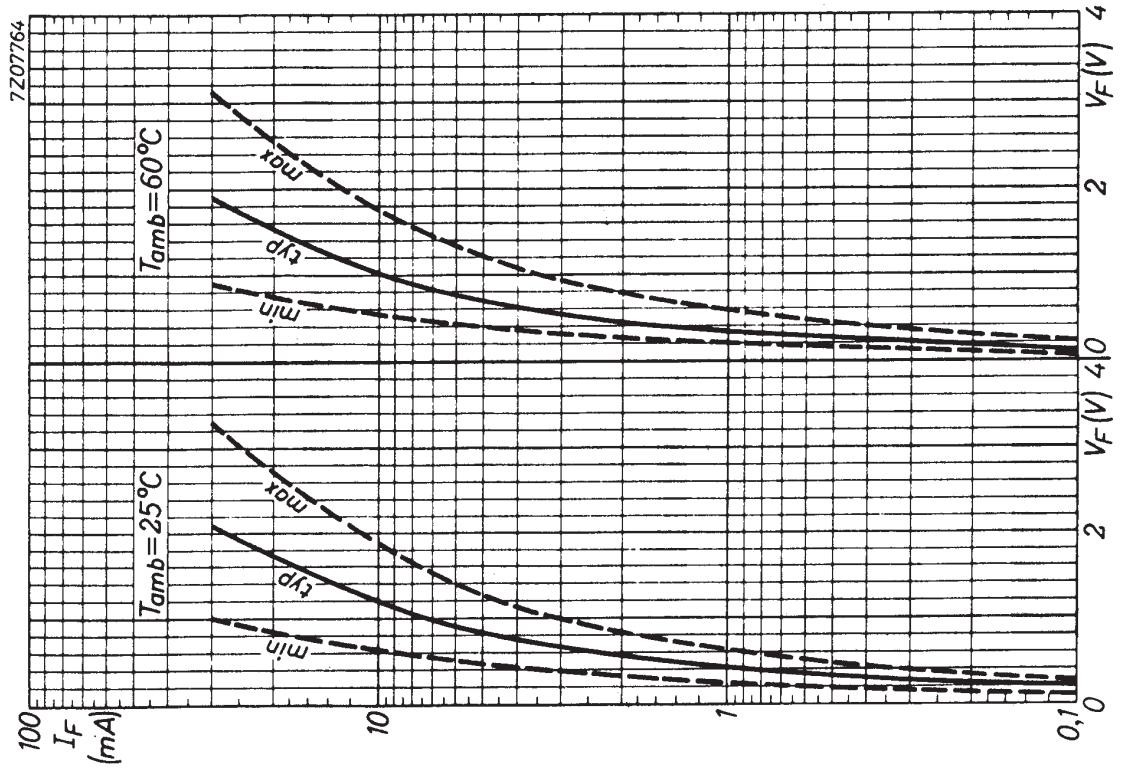
THERMAL RESISTANCE

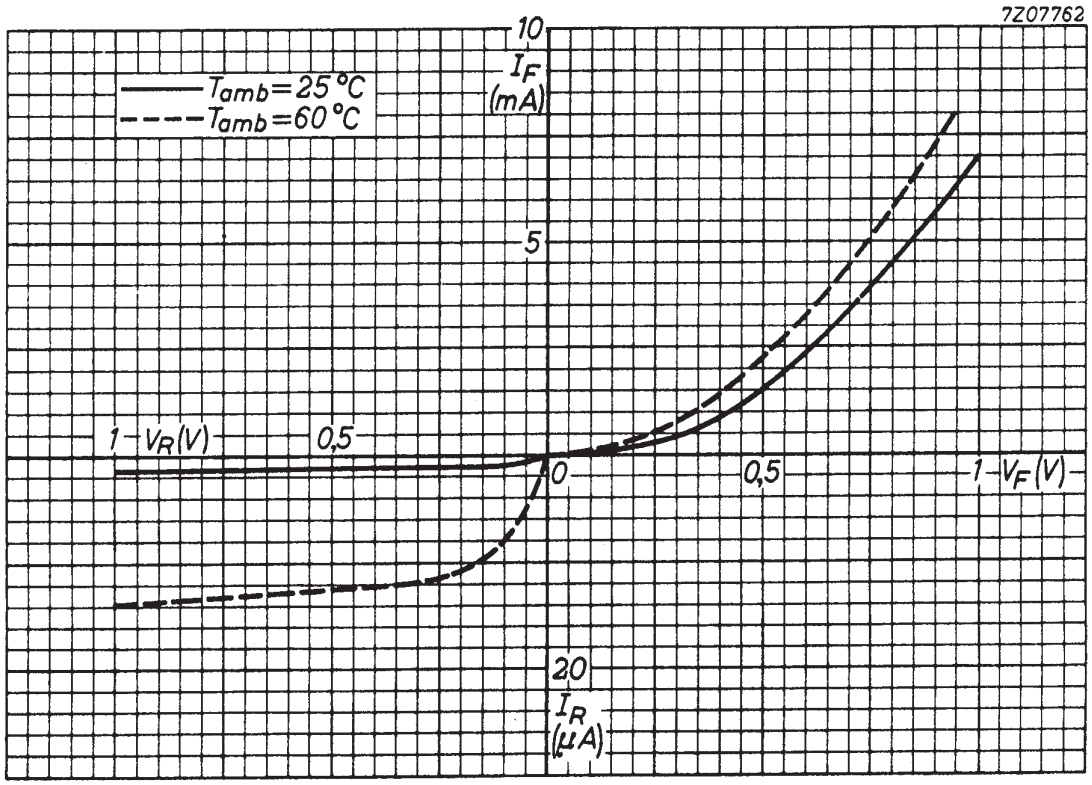
From junction to ambient in free air	$R_{th\ j\text{-}a}$	= 0,55 °C/mW

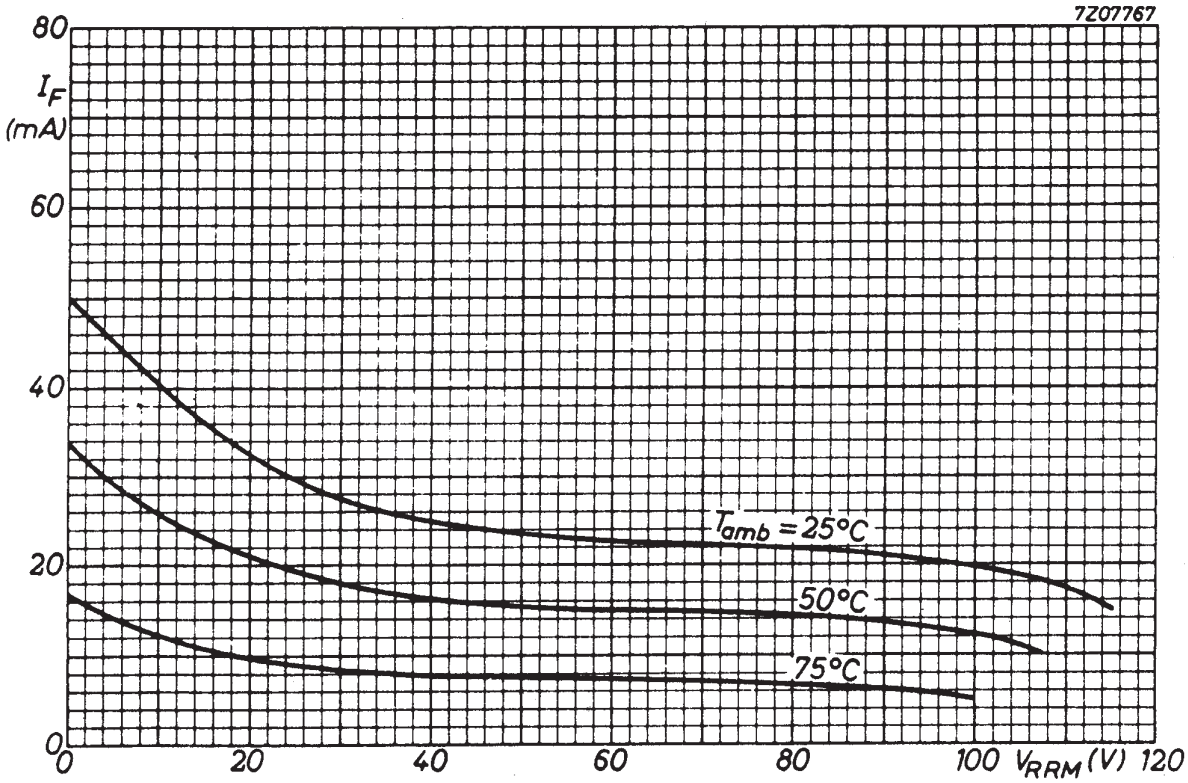
CHARACTERISTICS

		T_{amb} = 25 °C	T_{amb} = 60 °C
Forward voltage			
I_F = 0,1 mA	V_F	typ. 0,18 0,1 to 0,25	typ. 0,1 V 0,05 to 0,2 V
I_F = 10 mA	V_F	typ. 1,2 0,65 to 1,9	typ. 1,05 V 0,55 to 1,8 V
I_F = 30 mA	V_F	typ. 2,1 1,0 to 3,3	typ. 1,9 V 0,9 to 3,15 V
Reverse current			
V_R = 1,5 V	I_R	typ. 1,5 0,3 to 7	typ. 15 μA 6 to 45 μA
V_R = 10 V	I_R	typ. 4 0,5 to 11	typ. 20 μA 9 to 60 μA
V_R = 75 V	I_R	typ. 40 5,5 to 180	typ. 115 μA 35 to 260 μA
V_R = 100 V	I_R	typ. 75 10 to 275	typ. 190 μA 60 to 450 μA


7Z07763
T_{amb}=60°C
T_{amb}=25°C
max
typ
min
I_R (μA)
1000
100
10
1
0,1
V_R(V)
0
50
100
V_R(V)
0
50
100


7Z07764
T_{amb}=60°C
T_{amb}=25°C
max
typ
min
I_F (mA)
100
10
1
0,1
V_F(V)
0
2
4
V_F(V)
0
2
4


7Z07762
10
I_F
(mA)
T_{amb}=25 °C
T_{amb}=60 °C
5
1 V_R(V)
0,5
0
0,5
1 V_F(V)
20
I_R
(μA)


7Z07767
80
I_F
(mA)
60
40
20
0
T_{amb} = 25°C
50°C
75°C
0
20
40
60
80
100 V_{RRM}(V) 120