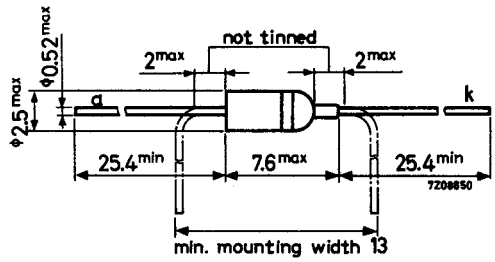
GERMANIUM DIODE

Germanium diode in subminiature all glass DO-7 construction for general purposes.

MECHANICAL DATA Dimensions in mm

DO-7



The coloured band indicates the cathode side

RATINGS (Limiting values according to the Absolute Maximum System as defined in IEC publication 134)

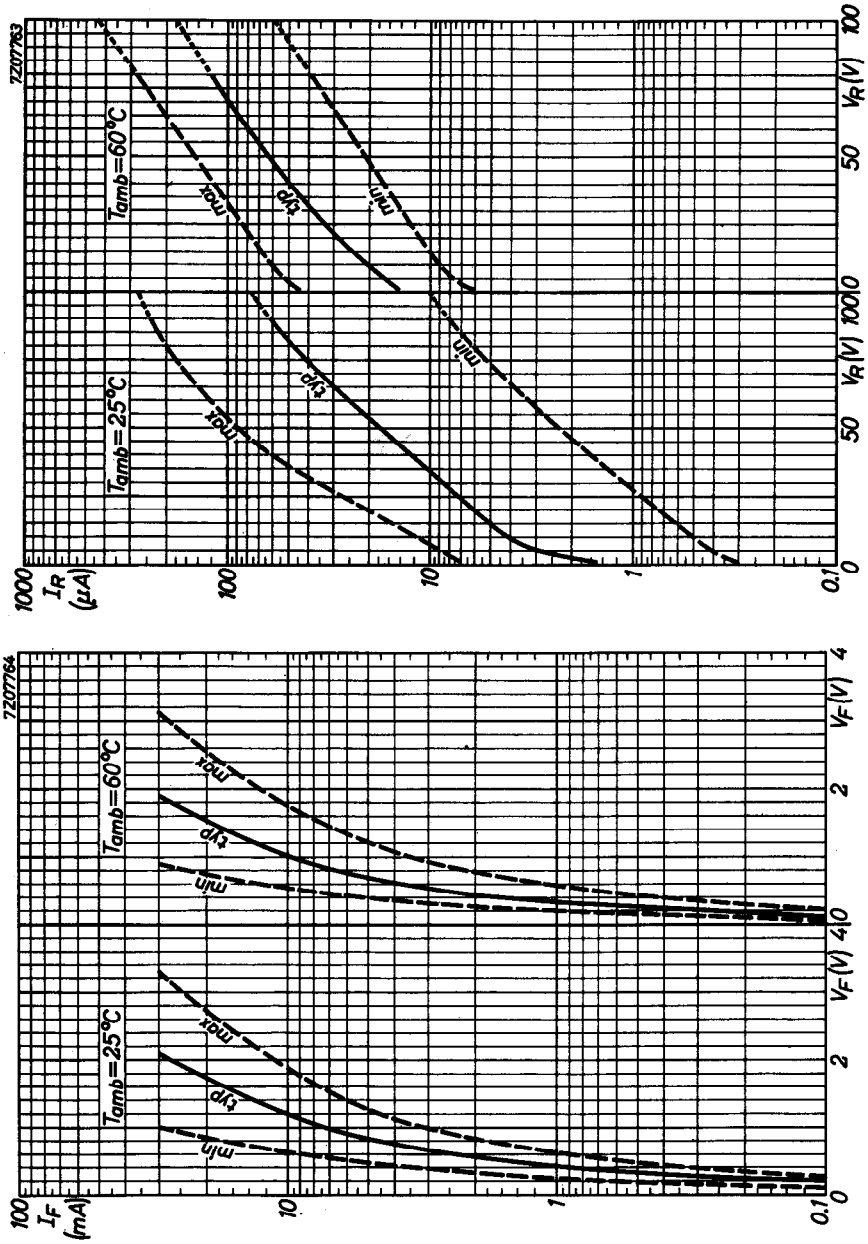
Average reverse voltage (averaged over any 50 ms period)	V_R	max.	90	V
Repetitive peak reverse voltage	V_{RRM}	max.	115	V
Average forward current (averaged over any 50 ms period)	I_F	max.	50	mA
Repetitive peak forward current	I_{FRM}	max.	150	mA
Non repetitive peak forward current ($t < 1$ s)	I_{FSM}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

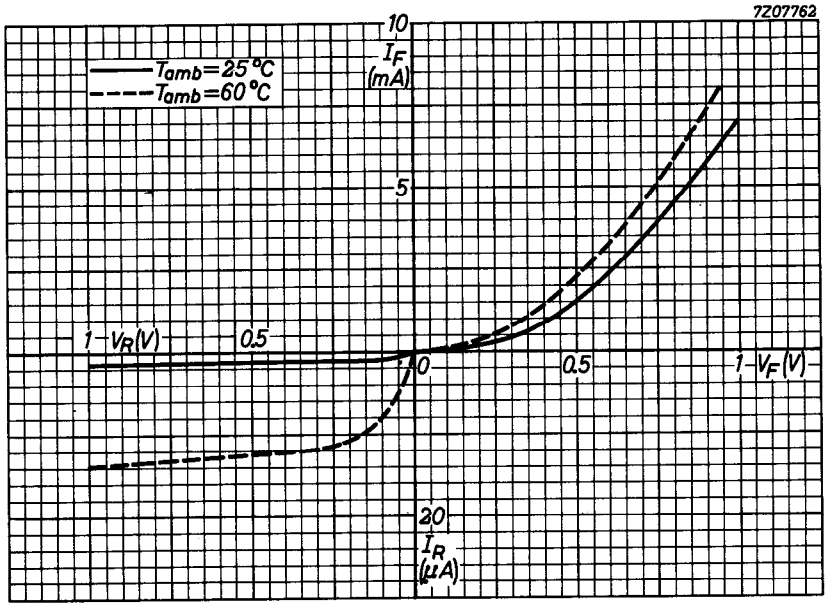
THERMAL RESISTANCE

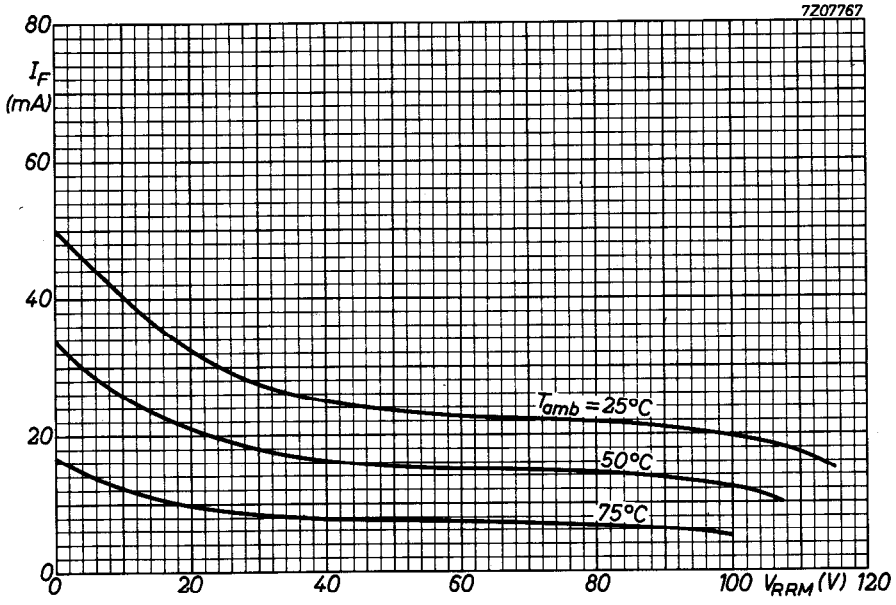
From junction to ambient in free air	$R_{th\ j\text{-}a}$	=	0.4	°C/mW

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 V	typ. 0.1 V 0.05 to 0.2 V
I_F = 10 mA	V_F	typ. 1.2 0.65 to 1.9 V	typ. 1.05 V 0.55 to 1.8 V
I_F = 30 mA	V_F	typ. 2.1 1.0 to 3.3 V	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 µA	typ. 15 µA 6 to 45 µA
V_R = 10 V	I_R	typ. 4 0.5 to 11 µA	typ. 20 µA 9 to 60 µA
V_R = 75 V	I_R	typ. 40 5.5 to 180 µA	typ. 115 µA 35 to 260 µA
V_R = 100 V	I_R	typ. 75 10 to 275 µA	typ. 190 µA 60 to 450 µA


7207763
Tamb=60°C
Tamb=25°C
max
typ
min
IR (μA)
VR(V)
7207764
IF (mA)
VF(V)


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