

POINT CONTACT DIODE

Germanium point contact diode in a subminiature all glass DO-7 envelope primarily intended for use in a.m. detector and ratio detector circuits.

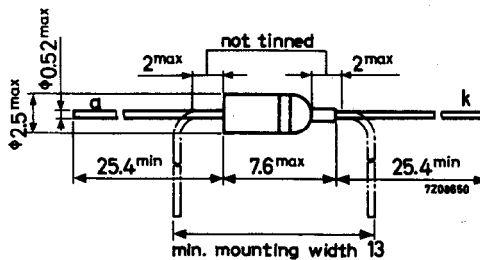
QUICK REFERENCE DATA

Continuous reverse voltage	V_R	max.	30 V
Repetitive peak reverse voltage	V_{RRM}	max.	45 V
Forward current (d.c.)	I_F	max.	35 mA
Repetitive peak forward current	I_{FRM}	max.	100 mA
Operating ambient temperature	T_{amb}	max.	60 °C
Forward voltage at $I_F = 10$ mA	V_F	<	2.2 V

MECHANICAL DATA

Dimensions in mm

DO-7



The white band indicates the cathode side

7Z3 2066

AA119

2-AA119

RATINGS (Limiting values) ¹⁾

Voltages

Continuous reverse voltage	V_R	max.	30 V
Repetitive peak reverse voltage	V_{RRM}	max.	45 V

Currents

Forward current (d.c.)	I_F	max.	35 mA
Average rectified forward current (averaged over any 50 ms period)	I_{FAV}	max.	35 mA
Repetitive peak forward current	I_{FRM}	max.	100 mA
Non repetitive peak forward current ($t < 1$ s)	I_{FSM}	max.	200 mA

Temperatures

Storage temperature	T_{stg}	-55 to +75 °C
Operating ambient temperature	T_{amb}	max. 60 °C

THERMAL RESISTANCE

From junction to ambient in free air	$R_{th\ j-a}$	=	0.45 °C/mW
--------------------------------------	---------------	---	------------

¹⁾ Limiting values according to the Absolute Maximum System as defined in IEC publication 134.

CHARACTERISTICS

Forward voltage at $T_{amb} = 25\text{ }^{\circ}\text{C}$

$I_F = 0.1\text{ mA}$	V_F	typ.	0.23	V
		<	0.30	V
$I_F = 1\text{ mA}$	V_F	typ.	0.56	V
		<	0.88	V
$I_F = 10\text{ mA}$	V_F	typ.	1.5	V
		<	2.2	V
$I_F = 30\text{ mA}^1)$	V_F	typ.	2.8	V
		<	4.0	V

Forward voltage at $T_{amb} = 60\text{ }^{\circ}\text{C}$

$I_F = 0.1\text{ mA}$	V_F	typ.	0.16	V
		<	0.25	V
$I_F = 1\text{ mA}$	V_F	typ.	0.50	V
		<	0.80	V
$I_F = 10\text{ mA}$	V_F	typ.	1.4	V
		<	2.1	V
$I_F = 30\text{ mA}^1)$	V_F	typ.	2.6	V
		<	3.8	V

Reverse current at $T_{amb} = 25\text{ }^{\circ}\text{C}$

$V_R = 0.1\text{ V}$	I_R	typ.	0.35	μA
		<	1.0	μA
$V_R = 1.5\text{ V}$	I_R	typ.	0.8	μA
		<	2.8	μA
$V_R = 10\text{ V}$	I_R	typ.	4.5	μA
		<	18	μA
$V_R = 30\text{ V}$	I_R	typ.	35	μA
		<	150	μA
$V_R = 45\text{ V}$	I_R	typ.	90	μA
		<	350	μA

Reverse current at $T_{amb} = 60\text{ }^{\circ}\text{C}$

$V_R = 0.1\text{ V}$	I_R	typ.	4.5	μA
		<	12	μA
$V_R = 1.5\text{ V}$	I_R	typ.	6	μA
		<	25	μA
$V_R = 10\text{ V}$	I_R	typ.	16	μA
		<	60	μA
$V_R = 30\text{ V}$	I_R	typ.	60	μA
		<	300	μA
$V_R = 45\text{ V}$	I_R	typ.	170	μA
		<	500	μA

¹⁾ Measured under pulsed conditions to prevent excessive dissipation.

