

High-reliability discrete products and engineering services since 1977

## 1N4565(A)-1N4584(A)

### 6.4V TEMPERATURE COMPENSATED ZENER DIODE

#### **FEATURES**

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

#### **MAXIMUM RATINGS**

Characteristics	Value
Operating and storage temperatures	-65 to +175°C
DC power dissipation	500mW @ 50°C
Power derating	4mW/°C above 50°C
Solder temperature	260°C for 10 s maximum

 $I_R = 2\mu A @ 25^{\circ}C \text{ and } V_R = 3V$ 

### **ELECTRICAL CHARACTERISTICS**

Part number (Note 1)	Zener test current (Note 3)	Maximum voltage temperature coefficient			Maximum reverse current I <sub>R</sub> @ 3 V	Maximum dynamic impedance (Note 2) Z <sub>ZT</sub> @ I <sub>ZT</sub>
	mA	ανz ±%/°C	±mV/°C	Temp. range	μА	Ohms
1N4565	.5	0.01	.64	0 to 75°C	2.0	200
1N4565A	.5	0.01	.64	-55 to 100°C	2.0	200
1N4566	.5	0.005	.32	0 to 75°C	2.0	200
1N4566A	.5	0.005	.32	-55 to 100°C	2.0	200
1N4567	.5	0.002	.13	0 to 75°C	2.0	200
1N4567A	.5	0.002	.13	-55 to 100°C	2.0	200
1N4568	.5	0.001	.06	0 to 75°C	2.0	200
1N4568A	.5	0.001	.06	-55 to 100°C	2.0	200
1N4569	.5	0.0005	.03	0 to 75°C	2.0	200
1N4569A	.5	0.0005	.03	-55 to 100°C	2.0	200
1N4570	.5	0.01	.64	0 to 75°C	2.0	100
1N4570A	.5	0.01	.64	-55 to 100°C	2.0	100
1N4571	1.0	0.005	.32	0 to 75°C	2.0	100
1N4571A	1.0	0.005	.32	-55 to 100°C	2.0	100
1N4572	1.0	0.002	.13	0 to 75°C	2.0	100
1N4572A	1.0	0.002	.13	-55 to 100°C	2.0	100
1N4573	1.0	0.001	.06	0 to 75°C	2.0	100
1N4573A	1.0	0.001	.06	-55 to 100°C	2.0	100
1N4574	1.0	0.0005	.03	0 to 75°C	2.0	100
1N4574A	1.0	0.0005	.03	-55 to 100°C	2.0	100
1N4575	2.0	0.01	.64	0 to 75°C	2.0	50
1N4575A	2.0	0.01	.64	-55 to 100°C	2.0	50
1N4576	2.0	0.005	.32	0 to 75°C	2.0	50
1N4576A	2.0	0.005	.32	-55 to 100°C	2.0	50
1N4577	2.0	0.002	.13	0 to 75°C	2.0	50



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#### **ELECTRICAL CHARACTERISTICS**

Part number (Note 1)	Zener test current (Note 3) I <sub>ZT</sub> mA	Maximum voltage temperature coefficient			Maximum reverse current I <sub>R</sub> @ 3 V	Maximum dynamic impedance (Note 2) Z <sub>ZT</sub> @ I <sub>ZT</sub>
		ανz ±%/°C	±mV/°C	Temp. range	μА	Ohms
1N4577A	2.0	0.002	.13	-55 to 100°C	2.0	50
1N4578	2.0	0.001	.06	0 to 75°C	2.0	50
1N4578A	2.0	0.001	.06	-55 to 100°C	2.0	50
1N4579	2.0	0.0005	.03	0 to 75°C	2.0	50
1N4579A	2.0	0.0005	.03	-55 to 100°C	2.0	50
1N4580	4.0	0.01	.64	0 to 75°C	2.0	25
1N4580A	4.0	0.01	.64	-55 to 100°C	2.0	25
1N4581	4.0	0.005	.32	0 to 75°C	2.0	25
1N4581A	4.0	.005	.32	-55 to 100°C	2.0	25
1N4582	4.0	.002	.13	0 to 75°C	2.0	25
1N4582A	4.0	.002	.13	-55 to 100°C	2.0	25
1N4583	4.0	.001	.06	0 to 75°C	2.0	25
1N4583A	4.0	.001	.06	-55 to 100°C	2.0	25
1N4584	4.0	.0005	.03	0 to 75°C	2.0	25
1N4584A	4.0	.0005	.03	-55 to 100°C	2.0	25

- Standard Vz tolerance is 6.4V  $\pm$ 5%. Tighter tolerances are available contact Digitron. Zener impedance is measured by superimposing 0.75 mA ac rms on 7.5 mA dc @ 25°C. Voltage measurements to be performed 15 seconds after application of dc test current  $I_{ZT}$ .



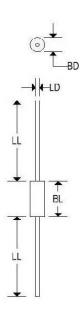
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### MECHANICAL CHARACTERISTICS

Case:	DO-7, hermetically sealed glass		
Polarity:	Body painted, alpha-numeric		
Lead finish:	Cathode band		



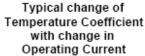
	DO-7					
	Inc	hes	Millimeters			
	Min	Max	Min	Max		
BD	, s#s	0.107	1	2.718		
BL	-	0.300		7.620		
LD	0.018	0.022	0.457	0.559		
LL	1,000	-	25.400	(4)		

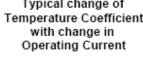


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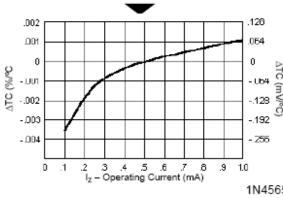
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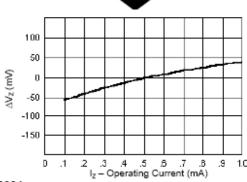
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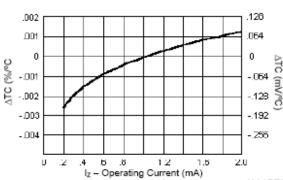


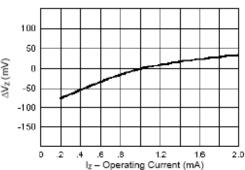
Typical Change in Zener Voltage with change in Operating Current





1N4565 - 1N4569A





1N4570 - 1N4574A

