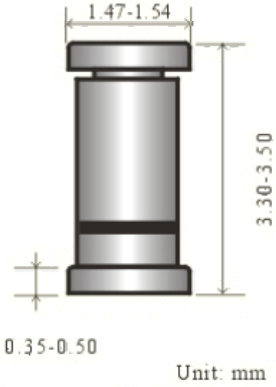


<b>Features</b>	<p style="text-align: center;">LL-34 GLASS</p> 
<ul style="list-style-type: none"> <li>■ Low Reverse Leakage</li> <li>■ Low Zener Impedance</li> <li>■ Power Dissipation of 500mW</li> <li>■ High Stability and High Reliability</li> </ul>	
<b>Mechanical Data</b>	
<ul style="list-style-type: none"> <li>■ Case: LL-34 Glass Case</li> <li>■ Polarity: Color band denotes cathode end</li> <li>■ Mounting Position: Any</li> </ul>	

**Maximum Ratings & Thermal Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Power Dissipation	Pd	500 <sup>1)</sup>	mW
Operating junction temperature	Tj	175	°C
Storage temperature range	Ts	-55-+175	°C

1) Valid provided that electrodes are kept at ambient temperature

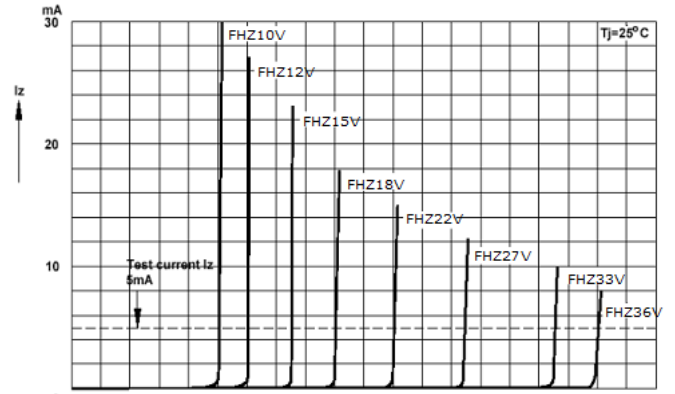
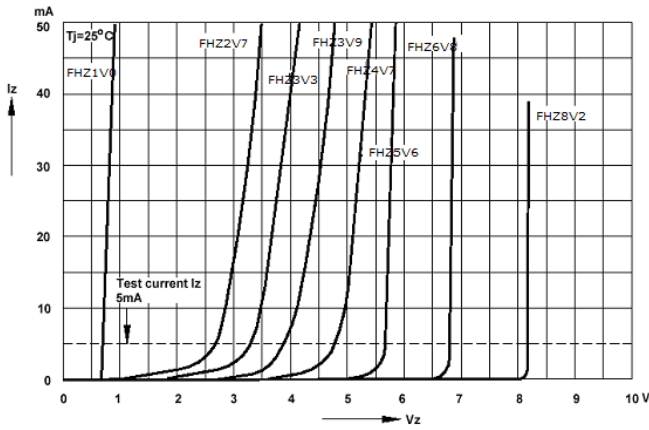
**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

TYPE	Zener Voltage		Reverse Current			Dynamic Resistance	
	Vz(V)		Test Condition	Ir(μA)	Test Condition	rd(Ω)	Test Condition
	Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
FHZ2V0	1.80	2.15	5.0	100	1.0	85	5.0
FHZ2V2	2.08	2.33	5.0	75	1.0	85	5.0
FHZ2V4	2.28	2.56	5.0	50	1.0	85	5.0
FHZ2V7	2.50	2.90	5.0	10	1.0	85	5.0
FHZ3V0	2.80	3.20	5.0	4	1.0	85	5.0
FHZ3V3	3.10	3.50	5.0	2	1.0	85	5.0
FHZ3V6	3.40	3.80	5.0	2	1.0	85	5.0
FHZ3V9	3.70	4.10	5.0	2	1.0	85	5.0
FHZ4V3	4.00	4.60	5.0	1	1.0	75	5.0
FHZ4V7	4.40	5.00	5.0	0.5	1.0	60	5.0
FHZ5V1	4.80	5.40	5.0	0.1	1.0	35	5.0
FHZ5V6	5.20	6.00	5.0	0.1	1.0	25	5.0
FHZ6V2	5.80	6.60	5.0	0.1	2.0	10	5.0
FHZ6V8	6.40	7.20	5.0	0.1	3.0	8	5.0
FHZ7V5	7.00	7.90	5.0	0.1	5.0	7	5.0
FHZ8V2	7.70	8.70	5.0	0.1	6.2	7	5.0
FHZ9V1	8.50	9.60	5.0	0.1	6.8	10	5.0
FHZ10V	9.40	10.60	5.0	0.1	7.5	15	5.0
FHZ11V	10.40	11.60	5.0	0.1	8.2	20	5.0
FHZ12V	11.40	12.70	5.0	0.1	9.1	20	5.0
FHZ13V	12.40	14.10	5.0	0.1	10.0	26	5.0
FHZ14V	13.30	14.70	5.0	0.1	10.0	26	5.0
FHZ15V	13.80	15.60	5.0	0.1	11.0	30	5.0
FHZ16V	15.30	17.10	5.0	0.1	12.0	40	5.0
FHZ18V	16.80	19.10	5.0	0.1	13.0	50	5.0
FHZ20V	18.80	21.20	5.0	0.1	15.0	55	5.0
FHZ22V	20.80	23.30	5.0	0.1	16.0	55	5.0
FHZ24V	22.80	25.60	5.0	0.1	18.0	80	5.0
FHZ27V	25.10	28.90	5.0	0.1	20.0	80	5.0
FHZ30V	28.00	32.00	5.0	0.1	22.0	80	5.0
FHZ33V	31.00	35.00	5.0	0.1	24.0	80	5.0
FHZ36V	34.00	38.00	5.0	0.1	27.0	80	5.0
FHZ39V	37.00	41.00	2.5	0.1	30.0	90	2.5

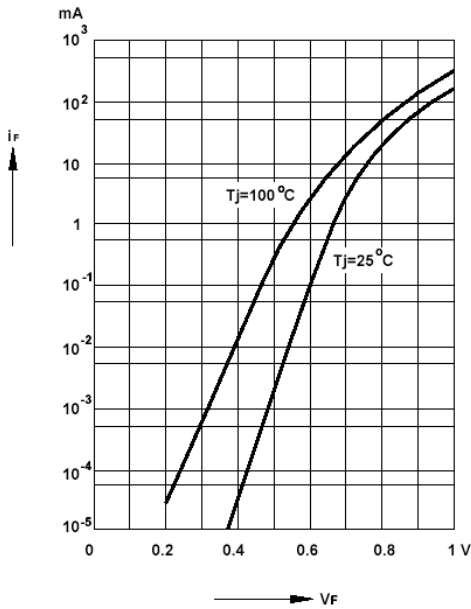
**Notes:**

- 1) Tested with pulses  $t_p = 20$  ms.
- 2)  $V_F(\text{Max}) = 1.20\text{V} @ I_F = 100\text{mA}$
- 3) The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.
- 4) These diodes are also available in DO-35 case with the type designation.

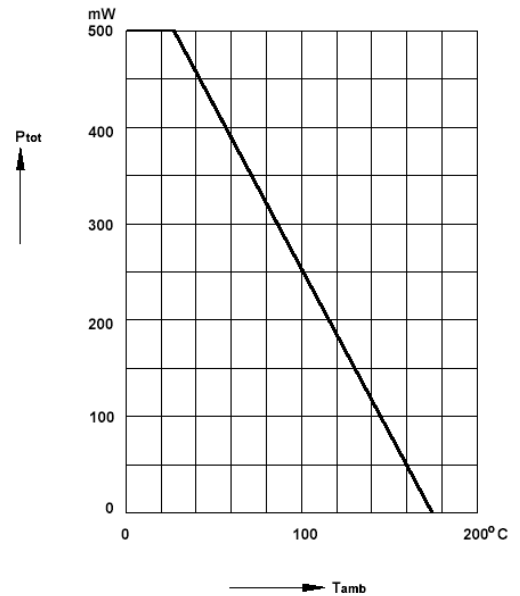
Breakdown characteristics at  $T_j = \text{constant}$  (pulsed)



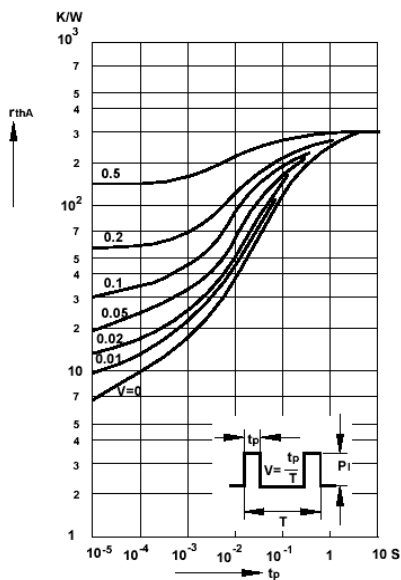
Forward characteristics



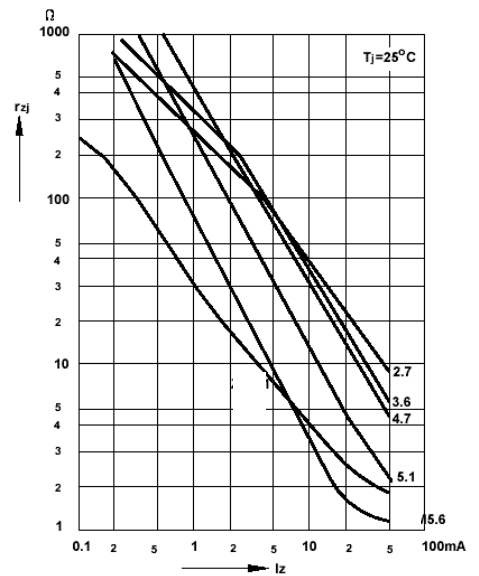
Admissible power dissipation versus ambient temperature



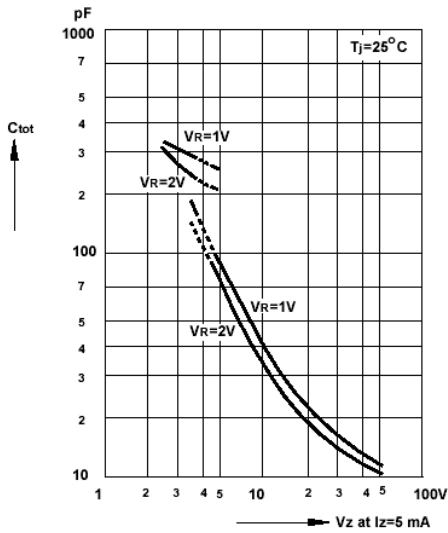
Pulse thermal resistance versus pulse duration



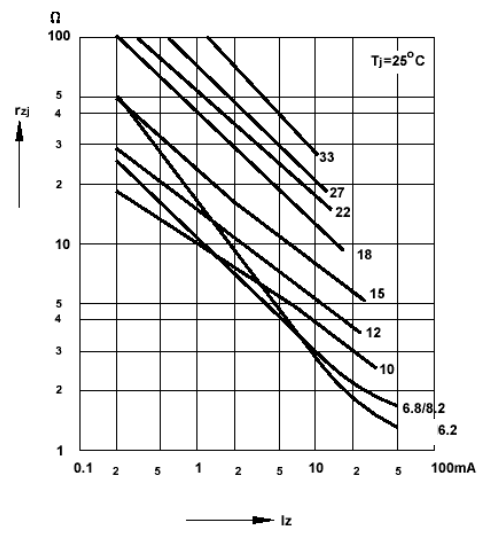
Dynamic resistance versus Zener current



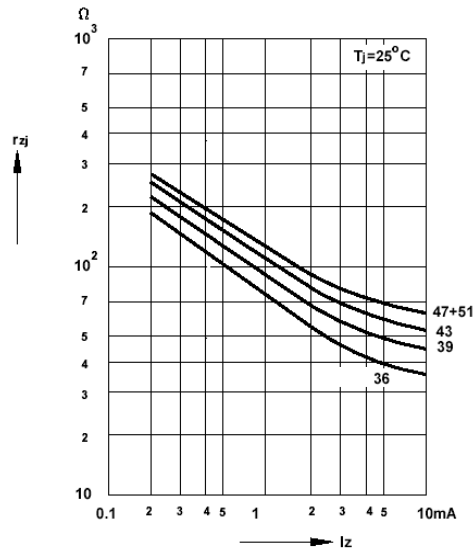
Capacitance versus Zener voltage



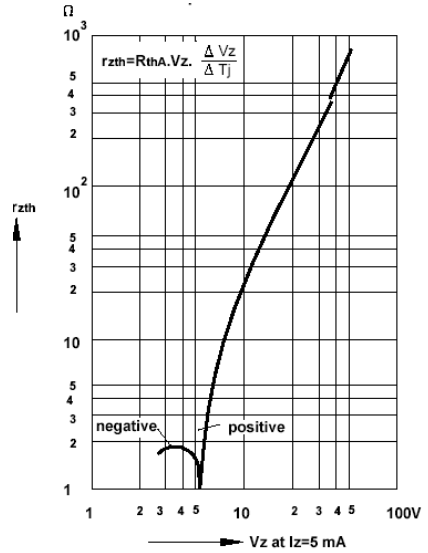
Dynamic resistance versus Zener current



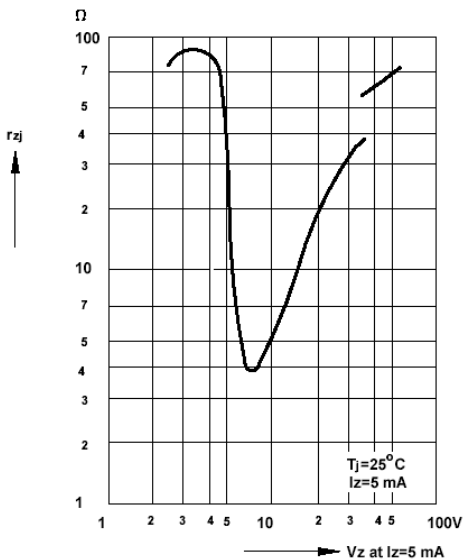
Dynamic resistance versus Zener current



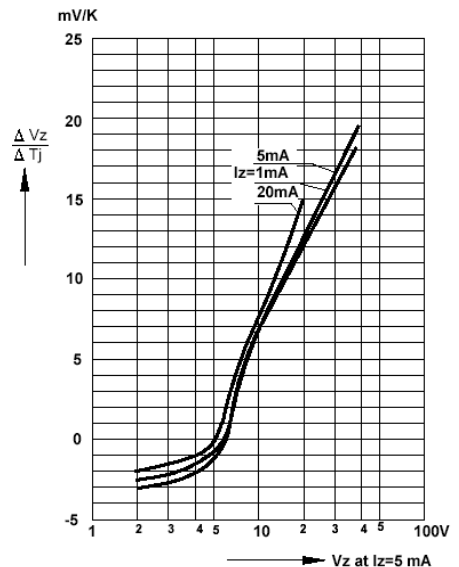
Thermal differential resistance versus Zener voltage



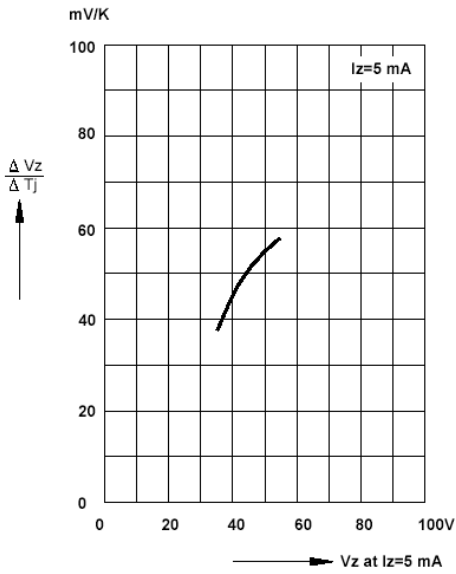
Dynamic resistance versus Zener voltage



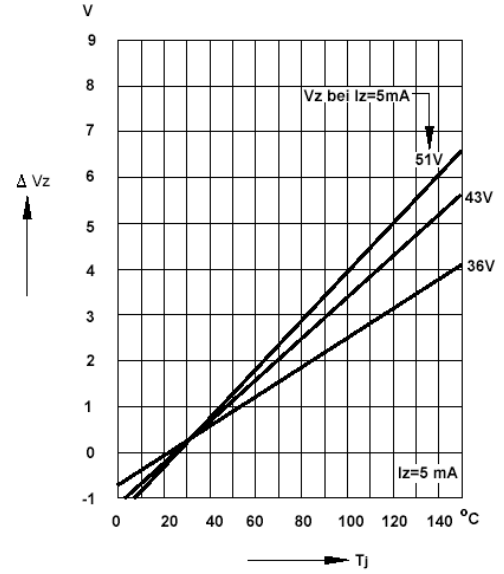
Temperature dependence of Zener voltage versus Zener voltage



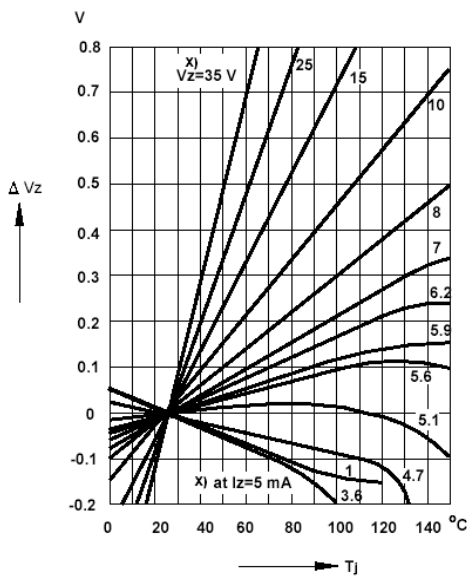
Temperature dependence of Zener voltage versus Zener voltage



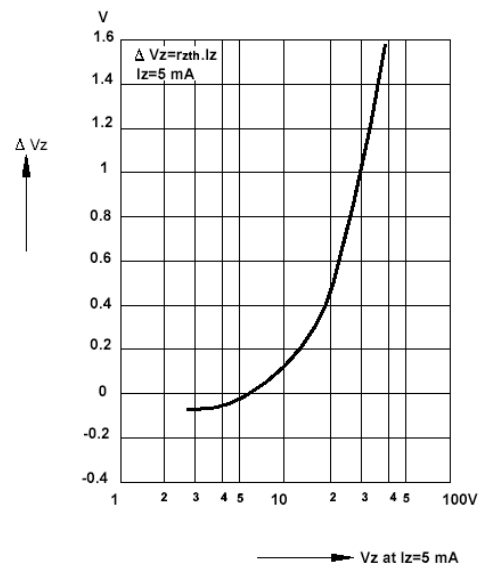
Change of Zener voltage versus junction temperature



Change of Zener voltage versus junction temperature



Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage



Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage

