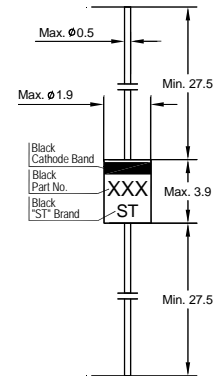


# 1N4689...1N4713

## Silicon Epitaxial Planar Zener Diodes



Glass Case DO-35  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

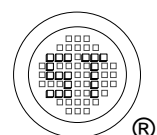
Parameter	Symbol	Value	Unit
Power Dissipation	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{Stg}}$	- 65 to + 175	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$ ( $V_F = 1.5\text{ V Max. at } I_F = 100\text{ mA}$ )

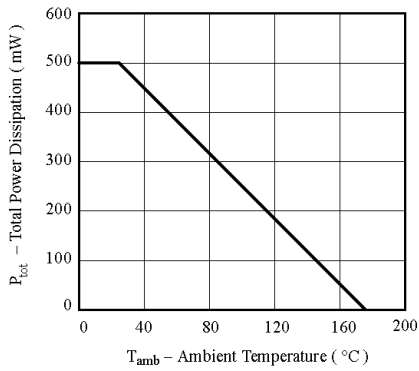
Type	Zener Voltage <sup>1)</sup> $V_Z$ (V)				Maximum Reverse Current		Maximum Zener Current <sup>2)</sup> $I_{ZM}$ (mA)
	Nom.	Min.	Max.	at $I_{ZT}$ ( $\mu\text{A}$ )	$I_R$ ( $\mu\text{A}$ )	at $V_R$ (V)	
1N4689	5.1	4.85	5.35	50	10	3	55
1N4690	5.6	5.32	5.88	50	10	4	50
1N4691	6.2	5.89	6.51	50	10	5	45
1N4692	6.8	6.46	7.14	50	10	5.1	35
1N4693	7.5	7.13	7.88	50	10	5.7	31.8
1N4694	8.2	7.79	8.61	50	1	6.2	29
1N4695	8.7	8.27	9.14	50	1	6.6	27.4
1N4696	9.1	8.65	9.56	50	1	6.9	26.2
1N4697	10	9.5	10.5	50	1	7.6	24.8
1N4698	11	10.45	11.55	50	0.05	8.4	21.6
1N4699	12	11.4	12.6	50	0.05	9.1	20.4
1N4700	13	12.35	13.65	50	0.05	9.8	19
1N4701	14	13.3	14.7	50	0.05	10.6	17.5
1N4702	15	14.25	15.75	50	0.05	11.4	16.3
1N4705	18	17.1	18.9	50	0.05	13.6	13.2
1N4713	30	28.5	31.5	50	0.01	22.8	7.9

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .

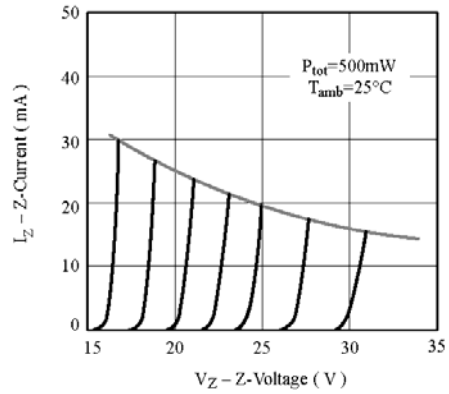
<sup>2)</sup> Maximum Zener current ratings are based on maximum zener voltage of the individual units.



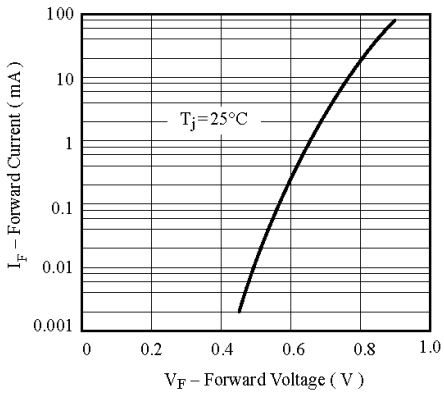
# 1N4689...1N4713



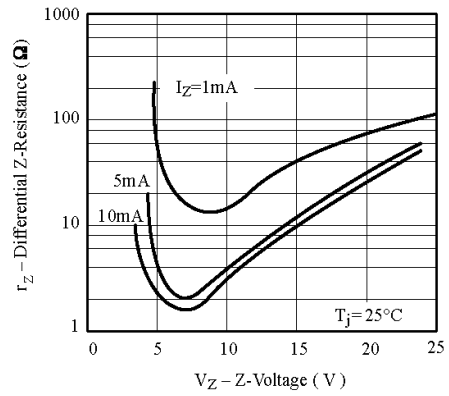
Total Power Dissipation vs. Ambient Temperature



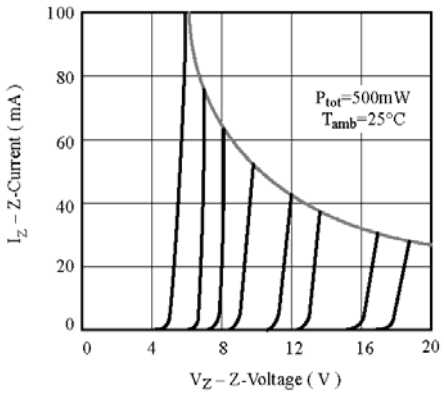
Z-Current vs. Z-Voltage



Forward Current vs. Forward Voltage



Differential Z-Resistance vs. Z-Voltage



Z-Current vs. Z-Voltage

