



Compact voltage regulation for high density circuits

Nexperia offers more than 1500 product types – including a high portion of automotive AEC-Q101 qualified portfolio. Both Japanese and European selection groups in a wide variety of voltage, package and configuration options. Benefit from unmatched supply security and customize your design in small scale, high density circuits.

Product features:

- › Comprehensive range of package and power dissipation options
- › Realization of customized, effective protection in small scaled, high density circuit designs.
- › Wide range of working voltages
- › Narrow working-voltage tolerances

Technical Specification Ranges:

- › 1051 standard leaded part numbers in:
 - › SOT23
 - › SOT323
 - › SOT89
 - › SOT223
 - › SOD123(F)
 - › SOD323(F)
 - › SOD523
- › 150 leadless DFN part numbers in DFN1006(BD)-2 (SOD882) incl. parts with side-wettable flanks
- › 310 Glass Package part numbers in:
 - › SOD27
 - › SOD80
 - › SOD66

Technical Specification Ranges:

- › I_{max} from 200 mA – 500 mA
- › V_{max} from 2 V – 105 V
- › P_{tot} from 250 mW – 1500 mW

Applications

- › General regulation and voltage reference functions
- › Over-voltage protection



DFN1006-2
1 x 0.6 x 0.27



SOT23
2.9 x 1.3 x 1



SOD323F
1.7 x 1.25 x 0.7



SOD123F
2.6 x 1.6 x 1.1



SOT223
6.5 x 3.5 x 1.65



SOT323
2 x 1.25 x 0.95

General purpose Zener diodes

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration	Series	Package	Automotive - qualified	Size (mm)	P_{tot} (mW)
500	-	3.3~24	C	Europe	Single	1N47xxA series	SOD66 (DO-41)	No	4.8 x 2.6 x 0.81	1000
	60	3.6~75				BZV85 series				
250	-	2.1~36	About 2%	Special	Single	NZX series	SOD27 (DO-35)	No	4.25 x 1.85 x 0.56	400
	40	2.4~75	B, C	Europe		BZX79 series				
400	40	2.4~75	C	Europe	Single	BZV90 series	SOT223 (SC-73)	Yes	6.5 x 3.5 x 1.65	1500
250	40	2.4~75	C	Europe	Single	BZV49 series	SOT89 (SC-62)	Yes	4.5 x 2.5 x 1.5	1000
250	40	2.4~75	B, C	Europe	Single	BZV55 series	SOD80C (MiniMelf)	No	3.5 x 1.5 x 1.5	400
200	40	2.4~75	B, C	Europe	Dual c.a.	BZB84 series	SOT23	Yes	2.9 x 1.3 x 1.0	250
			A, B, C		Single	BZX84 series				
250	30	5~6.8	0.2 V	Ave	Single	PLVA600A series				
250	40	2.4~75	B, C	Europe	Single	BZT52 series	SOD123	Yes	2.7 x 1.6 x 1.2	550
200		2.4~36	B	Japan		PDZ-GW series				
250	-	3.0~30	About 2.5%	Special	Single	NZH series	SOD123F	Yes	2.6 x 1.6 x 1.1	830
	40	2.4~75	B, C	Europe		BZT52H series				
200	40	10	B2	Japan	Dual isolated	PZU10DB2 series	SOT353 (SC-88A)	Yes	2.0 x 1.25 x 0.95	300
200	40	2.4~15	C	Europe	Dual c.a.	BZB784 series	SOT323 (SC-70)	Yes	2.0 x 1.25 x 0.95	350
200	40	2.4~75	B, C	Europe	Single	BZX84W series				
200	30	100	C	Europe	Back-to-back	BZB100A	SOD323 (SC-76)	Yes	1.7 x 1.25 x 0.95	300
	40	2.4~36	B2	Japan	Single	PDZ-B series				
250	40	2.4~75	B, C	Europe		Single	BZX384 series			
200	40	2.4~36	B, B1, B2, B3	Japan		PZUxBA series				
200	60	100	C	Europe	Single	BZX100A	SOD323F (SC-90)	Yes	1.7 x 1.25 x 0.7	550
200	40	2.4~36	B, B1, B2, B3	Japan		PZUxB series				
250	40	2.4~75	B, C	Europe		BZX84J series				
200	40	2.4~75	B, C	Europe	Single	BZX585 series	SOD523 (SC-79)	Yes	1.2 x 0.8 x 0.6	300
200	40	2.4~75	B, C	Europe	Single	BZX884 series	DFN1006-2 (SOD882)	Yes	1.0 x 0.6 x 0.48	250
		2.4~36	B, B2	Japan		PZUxBL series				
200	40	2.4~75	B, C	Europe	Single	BZX884S series	DFN1006BD-2 (SOD882BD)	Yes	1.0 x 0.6 x 0.47	250
250	40	2.4~30	B	Europe	Single	TDZxJ series	SOD323F	Yes	1.7 x 1.25 x 0.7	500

Notes:

Japan: B selection: app. 5% V_Z tolerance, B1, B2, B3 selections: app. 2% V_Z tolerance in sequential intervals
 Europe: A selection: app. 1% V_Z tolerance, B selection: app. 2% V_Z tolerance, C selection: app. 5% V_Z tolerance;
 the selections are in overlapping intervals

Ave: low-voltage avalanche regulator diodes
 Dual c.a.: dual common anode

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