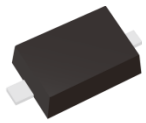
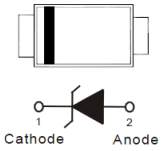
PZS113V9BES ~ PZS1143BES Series

SILICON ZENER DIODE

Voltage 3.9~43 V **Power** 150 mW

SOD-523





Features

- Planar die construction
- 150mW power dissipation
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: SOD-523, plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.00005 ounces, 0.0014 grams

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation at T_A = 25°C	P_D (1)	150	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ (2)	710	°C /W
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

NOTES:

1. Mounted on a 5mm^2 copper pads to each terminal.
2. Mounted on a FR-4 PCB, single-sided copper, mini pad .

PZS113V9BES ~ PZS1143BES Series

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Part Number	Nominal Zener Voltage				Max. Reverse Leakage Current		Marking Code
	V_Z@I_{ZT}				I_R@V_R		
	Nom. V	Min.V	Max.V	mA	uA	V	
PZS113V9BES	3.9	3.71	4.10	0.05	5	2	AQ
PZS114V3BES	4.3	4.09	4.52	0.05	4	2	CQ
PZS114V7BES	4.7	4.47	4.94	0.05	10	3	EQ
PZS115V1BES	5.1	4.85	5.36	0.05	10	3	FQ
PZS115V3BES	5.3	5.03	5.57	0.05	10	4	HQ
PZS115V6BES	5.6	5.32	5.88	0.05	10	4	JQ
PZS116V2BES	6.2	5.89	6.51	0.05	10	5	KQ
PZS116V8BES	6.8	6.46	7.14	0.05	10	5.1	LQ
PZS117V5BES	7.5	7.13	7.88	0.05	0.8	5.7	MQ
PZS118V2BES	8.2	7.79	8.61	0.05	1	6.2	NQ
PZS118V7BES	8.7	8.27	9.14	0.05	1	6.6	PP
PZS119V1BES	9.1	8.65	9.56	0.05	1	6.9	RQ
PZS1110BES	10	9.5	10.5	0.05	1	7.6	TQ
PZS1111BES	11	10.5	11.6	0.05	0.05	8.4	1Q
PZS1112BES	12	11.4	12.6	0.05	0.05	9.1	2Q
PZS1113BES	13	12.4	13.7	0.05	0.05	9.8	3Q
PZS1114BES	14	13.3	14.7	0.05	0.05	10.6	4Q
PZS1115BES	15	14.3	15.8	0.05	0.05	11.4	5Q
PZS1116BES	16	15.2	16.8	0.05	0.05	12.1	6Q
PZS1117BES	17	16.2	17.9	0.05	0.05	12.9	7Q
PZS1118BES	18	17.1	18.9	0.05	0.05	13.6	8Q
PZS1119BES	19	18.1	20	0.05	0.05	14.4	9Q
PZS1120BES	20	19	21	0.05	0.01	15.2	UQ
PZS1122BES	22	20.9	23.1	0.05	0.01	16.7	VQ
PZS1124BES	24	22.8	25.2	0.05	0.01	18.2	WQ
PZS1125BES	25	23.8	26.3	0.05	0.01	19	XQ
PZS1127BES	27	25.7	28.4	0.05	0.01	20.4	YQ
PZS1128BES	28	26.6	29.4	0.05	0.01	21.2	ZQ
PZS1130BES	30	28.5	31.5	0.05	0.01	22.8	RA

PZS113V9BES ~ PZS1143BES Series

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Part Number	Nominal Zener Voltage				Max. Reverse Leakage Current		Marking Code
	$V_Z@I_{ZT}$				$I_R@V_R$		
	Nom. V	Min.V	Max.V	mA	uA	V	
PZS1133BES	33	31.4	34.7	0.05	0.01	25	RB
PZS1136BES	36	34.2	37.8	0.05	0.01	27.3	RC
PZS1139BES	39	37.1	41	0.05	0.01	29.6	RD
PZS1143BES	43	40.9	45.2	0.05	0.01	32.6	RE

PZS113V9BES ~ PZS1143BES Series

TYPICAL CHARACTERISTIC CURVES

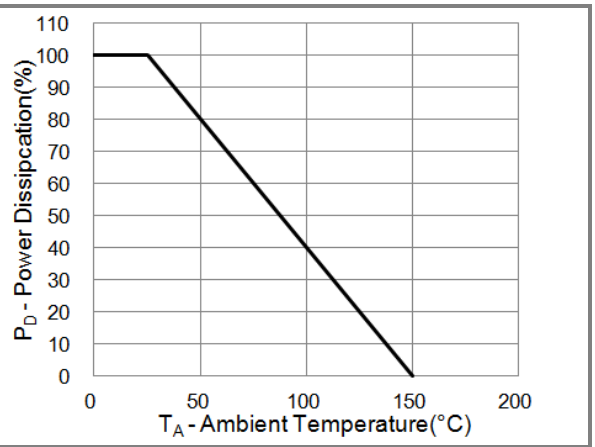


Fig.1 Power Derating Curve

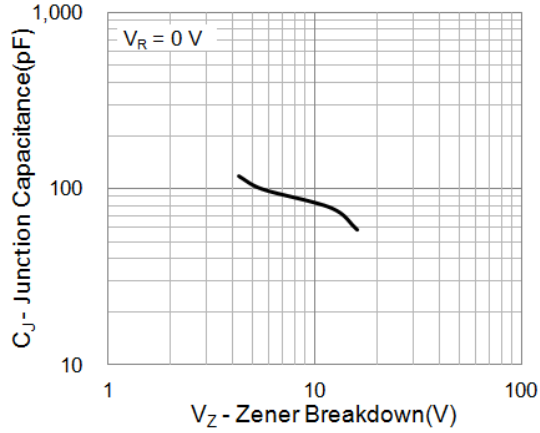


Fig.2 Typical Junction Capacitance

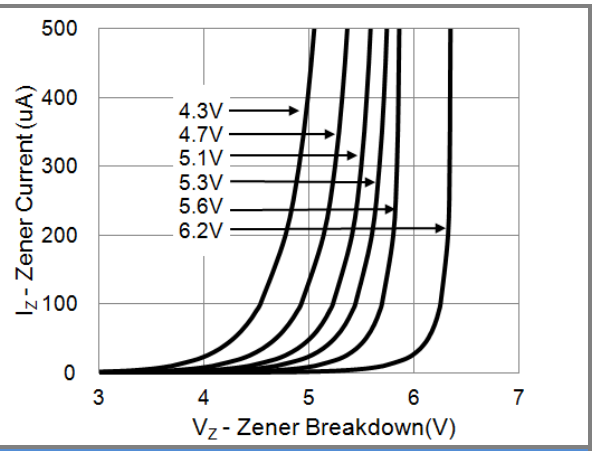


Fig.3 Typical Zener Breakdown

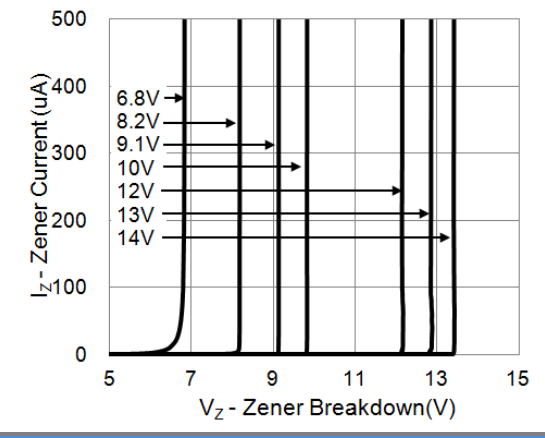


Fig.4 Typical Zener Breakdown

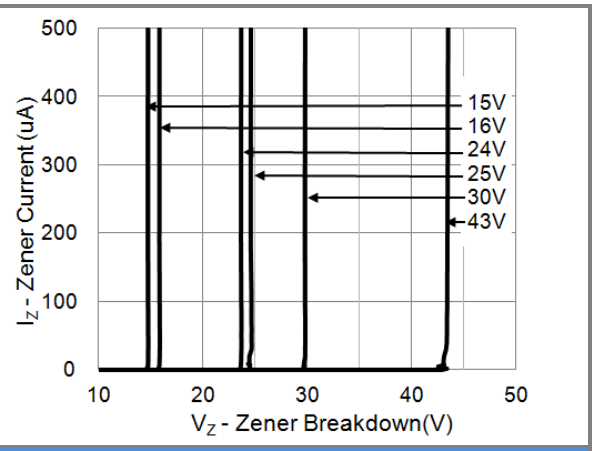


Fig.5 Typical Zener Breakdown

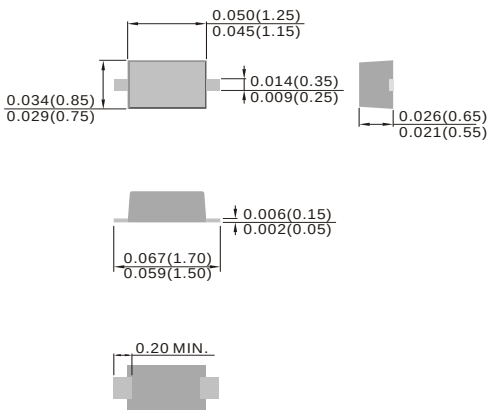
PZS113V9BES ~ PZS1143BES Series

Part No Packing Code Version

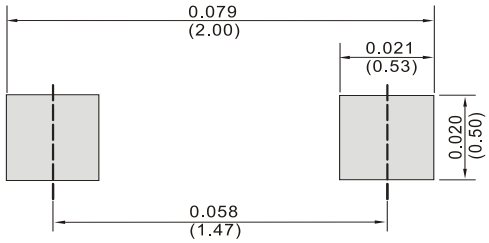
Part No Packing Code	Package Type	Packing Type	Marking	Version
PZS11xxxBES_R1_00001	SOD-523	5K pcs / 7” reel	See Table	Halogen free

Packaging Information & Mounting Pad Layout

SOD-523 Dimension — Unit: inch(mm)



SOD-523 Pad Layout — Unit: inch(mm)



PZS113V9BES ~ PZS1143BES Series

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