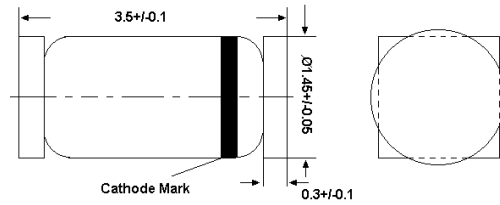


BZT...HS Series

SILICON PLANAR ZENER DIODES

LS-34



Glass case MiniMELF

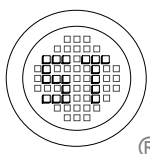
Dimensions in mm

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

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^\circ\text{C}$

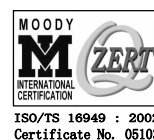
Characteristics at $T_{\text{amb}} = 25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	0.3	K/mW



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



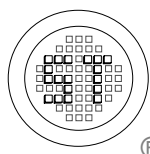
Dated : 22/01/2005

BZT...HS Series

Characteristics at $T_a = 25^\circ\text{C}$

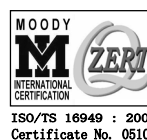
TYPE	Zener Voltage			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	Ohm at I_{ZT}	I_{ZT} (mA)	I_R (uA) Max.	V_R (V)
BZT2.0HS	1.88	2.20	5	100	5	120	0.5
BZT2.0HSA	1.88	2.10					
BZT2.0HSB	2.02	2.20					
BZT2.2HS	2.12	2.41	5	100	5	120	0.7
BZT2.2HSA	2.12	2.30					
BZT2.2HSB	2.22	2.41					
BZT2.4HS	2.33	2.63	5	100	5	120	1
BZT2.4HSA	2.33	2.52					
BZT2.4HSB	2.43	2.63					
BZT2.7HS	2.54	2.91	5	110	5	100	1
BZT2.7HSA	2.54	2.75					
BZT2.7HSB	2.69	2.91					
BZT3.0HS	2.85	3.22	5	120	5	50	1
BZT3.0HSA	2.85	3.07					
BZT3.0HSB	3.01	3.22					
BZT3.3HS	3.16	3.53	5	120	5	20	1
BZT3.3HSA	3.16	3.38					
BZT3.3HSB	3.32	3.53					
BZT3.6HS	3.47	3.83	5	120	5	10	1
BZT3.6HSA	3.47	3.68					
BZT3.6HSB	3.62	3.83					
BZT3.9HS	3.77	4.14	5	120	5	5	1
BZT3.9HSA	3.77	3.98					
BZT3.9HSB	3.92	4.14					
BZT4.3HS	4.05	4.53	5	120	5	5	1
BZT4.3HSA	4.05	4.26					
BZT4.3HSB	4.20	4.40					
BZT4.3HSC	4.34	4.53					
BZT4.7HS	4.47	4.91	5	100	5	5	1
BZT4.7HSA	4.47	4.65					
BZT4.7HSB	4.59	4.77					
BZT4.7HSC	4.71	4.91					
BZT5.1HS	4.85	5.35	5	70	5	5	1.5
BZT5.1HSA	4.85	5.03					
BZT5.1HSB	4.97	5.18					
BZT5.1HSC	5.12	5.35					

Tested with pulse $t_p = 20\text{ms}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 550-159-04-002-04

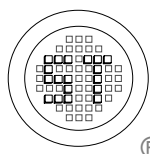
Dated : 22/01/2005

BZT...HS Series

Characteristics at $T_a = 25^\circ\text{C}$

TYPE	Zener Voltage			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	Ohm at I_{ZT}	I_{ZT} (mA)	I_R (uA) Max.	V_R (V)
BZT5.6HS	5.29	5.88	5	40	5	5	2.5
BZT5.6HSA	5.29	5.52					
BZT5.6HSB	5.46	5.70					
BZT5.6HSC	5.64	5.88					
BZT6.2HS	5.81	6.40	5	30	5	5	3
BZT6.2HSA	5.81	6.06					
BZT6.2HSB	5.99	6.24					
BZT6.2HSC	6.16	6.40					
BZT6.8HS	6.32	6.97	5	25	5	2	3.5
BZT6.8HSA	6.32	6.59					
BZT6.8HSB	6.52	6.79					
BZT6.8HSC	6.70	6.97					
BZT7.5HS	6.88	7.64	5	25	5	0.5	4
BZT7.5HSA	6.88	7.19					
BZT7.5HSB	7.11	7.41					
BZT7.5HSC	7.33	7.64					
BZT8.2HS	7.56	8.41	5	20	5	0.5	5
BZT8.2HSA	7.56	7.90					
BZT8.2HSB	7.82	8.15					
BZT8.2HSC	8.07	8.41					
BZT9.1HS	8.33	9.29	5	20	5	0.5	6
BZT9.1HSA	8.33	8.70					
BZT9.1HSB	8.61	8.99					
BZT9.1HSC	8.89	9.29					
BZT10HS	9.19	10.3	5	20	5	0.2	7
BZT10HSA	9.19	9.59					
BZT10HSB	9.48	9.90					
BZT10HSC	9.82	10.3					

Tested with pulse $t_p = 20\text{ms}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 550-159-04-02-04

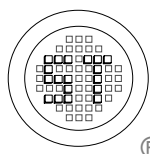
Dated : 22/01/2005

BZT...HS Series

Characteristics at $T_a = 25^\circ\text{C}$

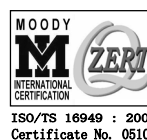
TYPE	Zener Voltage			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	Ohm at I_{ZT}	I_{ZT} (mA)	I_R (μA) Max.	V_R (V)
BZT11HS	10.18	11.26	5	20	5	0.2	8
BZT11HSA	10.18	10.63					
BZT11HSB	10.50	10.95					
BZT11HSC	10.82	11.26					
BZT12HS	11.13	12.30	5	25	5	0.2	9
BZT12HSA	11.13	11.63					
BZT12HSB	11.50	11.92					
BZT12HSC	11.80	12.30					
BZT13HS	12.18	13.62	5	25	5	0.2	10
BZT13HSA	12.18	12.71					
BZT13HSB	12.59	13.16					
BZT13HSC	13.03	13.62					
BZT15HS	13.48	15.02	5	25	5	0.2	11
BZT15HSA	13.48	14.09					
BZT15HSB	13.95	14.56					
BZT15HSC	14.42	15.02					
BZT16HS	14.87	16.50	5	25	5	0.2	12
BZT16HSA	14.87	15.50					
BZT16HSB	15.33	15.96					
BZT16HSC	15.79	16.50					
BZT18HS	16.34	18.30	5	30	5	0.2	13
BZT18HSA	16.34	17.06					
BZT18HSB	16.90	17.67					
BZT18HSC	17.51	18.30					
BZT20HS	18.14	20.45	5	30	5	0.2	15
BZT20HSA	18.14	18.96					
BZT20HSB	18.80	19.68					
BZT20HSC	19.52	20.45					
BZT22HS	20.23	22.61	5	30	5	0.2	17
BZT22HSA	20.23	21.08					
BZT22HSB	20.76	21.65					
BZT22HSC	21.22	22.09					
BZT22HSD	21.68	22.61					
BZT24HS	22.26	24.81	5	35	5	0.2	19
BZT24HSA	22.26	23.12					
BZT24HSB	22.75	23.73					
BZT24HSC	23.29	24.27					
BZT24HSD	23.81	24.81					

Tested with pulse $t_p = 20\text{ms}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 550-159-04-002-04

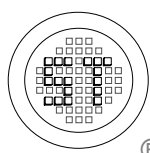
Dated : 22/01/2005

BZT...HS Series

Characteristics at $T_a = 25^\circ\text{C}$

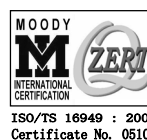
TYPE	Zener Voltage			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	Ohm at I_{ZT}	I_{ZT} (mA)	I_R (uA) Max.	V_R (V)
BZT27HS	24.26	27.64	5	45	5	0.2	21
BZT27HSA	24.26	25.52					
BZT27HSB	24.97	26.26					
BZT27HSC	25.63	26.95					
BZT27HSD	26.29	27.64					
BZT30HS	26.99	30.51	5	55	5	0.2	23
BZT30HSA	26.99	28.39					
BZT30HSB	27.70	29.13					
BZT30HSC	28.36	29.82					
BZT30HSD	29.02	30.51					
BZT33HS	29.68	33.11	5	65	5	0.2	25
BZT33HSA	29.68	31.22					
BZT33HSB	30.32	31.88					
BZT33HSC	30.90	32.50					
BZT33HSD	31.49	33.11					
BZT36HS	32.14	35.77	5	75	5	0.2	27
BZT36HSA	32.14	33.79					
BZT36HSB	32.79	34.49					
BZT39HSC	33.40	35.13					
BZT36HSD	34.01	35.77					
BZT39HS	34.68	38.52	5	85	5	0.2	30
BZT39HSA	34.68	36.47					
BZT39HSB	35.36	37.19					
BZT39HSC	36.00	37.85					
BZT39HSD	36.63	38.52					

Tested with pulse $t_p = 20\text{ms}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 550-159-04-002-04

Dated : 22/01/2005