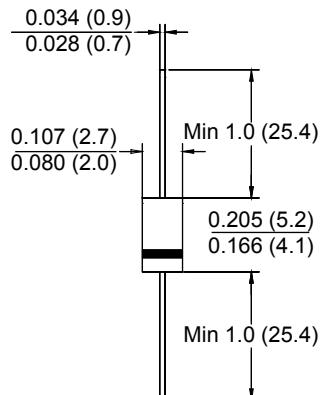


BZT03C-12

SILICON Z-DIODES AND TRANSIENT VOLTAGE SUPPRESSORS

Features

- Glass passivated junction
- Hermetically sealed package
- Clamping time in picoseconds



Applications

Medium power voltage regulators and medium power transient suppression circuits

Dimensions in inches and (millimeters)
DO-41 Plastic Package

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

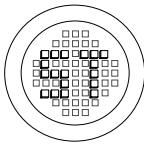
Parameter	Symbol	Value	Unit
Power Dissipation $I = 10 \text{ mm}, T_L = 25^\circ\text{C}$ $T_{\text{amb}} = 25^\circ\text{C}$	P_V	3.25 1.3	W
Repetitive Peak Reverse Power Dissipation	P_{ZRM}	10	W
Non Repetitive Peak Surge Power Dissipation $t_p = 100 \mu\text{s}, T_j = 25^\circ\text{C}$	P_{ZSM}	600	W
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^\circ\text{C}$

Maximum Thermal Resistance and Characteristics at $T_j = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Junction Ambient $I = 10 \text{ mm}, T_L = \text{constant}$ on PC board with spacing 25 mm	R_{thJA}	46 100	K/W
Forward Voltage at $I_F = 500 \text{ mA}$	V_F	1.2	V

Type	VZ	r_{zj}	TK _{VZ} at I_Z		I_R at V_R		Clamping at		Stand-off at	
			$V_{(\text{CL})R}^{1)}$	I_{RSM}	I_R	V_R	V	A	μA	V
BZT03-12	11.4...12.7	< 7	0.05...0.1	50	< 3	9.1	< 17	17.7	< 5	10

¹⁾ 10/1000 exp. Falling pulse $t_p = 1000 \mu\text{s}$ down to 50%



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SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

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