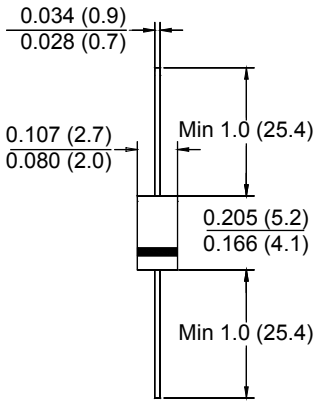
BZT03C-12

SILICON Z-DIODES AND TRANSIENT VOLTAGE SUPPRESSORS

Features

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



Dimensions in inches and (millimeters)

DO-41 Plastic Package

Applications

Medium power voltage regulators and medium power transient suppression circuits

Absolute Maximum Ratings (T_j = 25 °C)

Parameter		Symbol	Value	Unit
Power Dissipation	l = 10 mm, T_L = 25 °C T_{amb} = 25 °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 µs, T_j = 25 °C		P_{ZSM}	600	W
Junction Temperature		T_j	175	°C
Storage Temperature Range		T_S	-65 to +175	°C

Maximum Thermal Resistance and Characteristics at T_j = 25 °C

Parameter		Symbol	Max.	Unit
Junction Ambient	l = 10 mm, T_L = constant on PC board with spacing 25 mm	R_{thJA}	46 100	K/W
Forward Voltage at I_F = 500 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	
							$V_{(CL)R}$ [1]	I_{RSM}	I_R	V_R
	V	Ω	%K	mA	µA	V	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 µs down to 50%