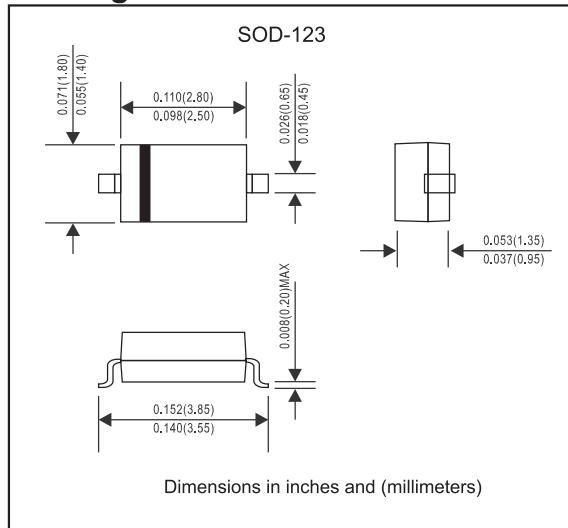


## FEATURES

- High breakdown voltage
- Low turn-on voltage
- Guard ring construction for transient protection
- Compliant to Halogen - free

**MARKING:** Z46/S9

## Package outline



## Maximum Ratings @ $T_a=25^\circ\text{C}$

Parameter	Symbol	Limit	Unit
<b>Peak repetitive peak reverse voltage</b>	$V_{RRM}$	100	V
<b>Working peak reverse voltage</b>	$V_{RWM}$		
<b>Forward continuous current</b>	$I_F$	150	mA
<b>Repetitive peak forward current (Note 1) @ <math>tp &lt; 1.0\text{s}</math>, Duty Cycle &lt; 50%</b>	$I_{FRM}$	350	mA
<b>Forward surge current (Note 1) @ <math>tp = 10\text{ms}</math></b>	$I_{FSM}$	750	mA
<b>Power dissipation</b>	$P_D$	500	mW
<b>Thermal resistance junction to ambient air</b>	$R_{\theta JA}$	200	°C/W
<b>Junction temperature</b>	$T_j$	125	°C
<b>Storage temperature</b>	$T_{STG}$	-55~+150	°C

## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>Reverse breakdown voltage (Note 2)</b>	$V_R$	$I_R= 100\mu\text{A}$	100			V
<b>Reverse voltage leakage current</b>	$I_R$	$V_{R1}=1.5\text{V}$			0.3	$\mu\text{A}$
		$V_{R2}=10\text{V}$			0.5	
		$V_{R3}=50\text{V}$			1	
		$V_{R4}=75\text{V}$			2	
<b>Forward voltage (Note 2)</b>	$V_F$	$I_{F1}=0.1\text{mA}$			0.25	V
		$I_{F2}=10\text{mA}$			0.45	
		$I_{F3}=250\text{mA}$			1	
<b>Diode capacitance</b>	$C_T$	$V_R=0, f=1\text{MHz}$		20		$\text{pF}$
		$V_R=1\text{V}, f=1\text{MHz}$		12		

Notes: 1. Part mounted on FR-4 board with recommended pad layout.

2. Short duration pulse test used to minimize self-heating effect.

## Typical Characteristics

