

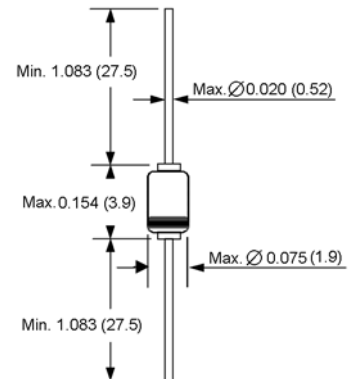
## Features

- ◆ For general purpose applications.
- ◆ This diode features low turn-on voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- ◆ Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- ◆ This diode is also available in the MiniMELF case with type designation BAS86.

## Mechanical Data

- ◆ Case: DO-35 Glass Case
- ◆ Weight: approx. 0.13g

## DO-204AH (DO-35 Glass)



## Maximum Ratings and Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Continuous reverse voltage	$V_R$	50	Volts
Forward continuous current at $T_{amb}=25^\circ\text{C}$	$I_F$	200 <sup>(1)</sup>	mA
Repetitive peak forward current at $t_p < 1\text{s}$ , $v \leq 0.5$ , $T_{amb}=25^\circ\text{C}$	$I_{FRM}$	500 <sup>(1)</sup>	mA
Power dissipation at $T_{amb}=25^\circ\text{C}$	$P_{tot}$	200 <sup>(1)</sup>	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	300 <sup>(1)</sup>	$^\circ\text{C/W}$
Junction temperature	$T_j$	125	$^\circ\text{C}$
Ambient operating temperature range	$T_{amb}$	-65 to +125	$^\circ\text{C}$
Storage temperature range	$T_s$	-65 to +150	$^\circ\text{C}$



## Electrical Characteristics

( $T_j=25^\circ\text{C}$  unless otherwise noted.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$ (pulsed)	50	-	-	Volts
Leakage current	$I_R$	$V_R=40\text{V}$	-	0.3	5.0	$\mu\text{A}$
Forward voltage pulse test $t_p < 300\mu\text{s}$ , $\delta < 2\%$	$V_F$	$I_F=0.1\text{mA}$	-	0.200	0.300	Volt
		$I_F=1\text{mA}$	-	0.275	0.380	
		$I_F=10\text{mA}$	-	0.365	0.450	
		$I_F=30\text{mA}$	-	0.460	0.600	
		$I_F=100\text{mA}$	-	0.700	0.900	
Capacitance	$C_{tot}$	$V_R=1\text{V}$ , $f=1\text{MHz}$	-	-	8	pF
Reverse recovery time	$t_{rr}$	$I_F=10\text{mA}$ , $I_R=10\text{mA}$ , to $I_R=1\text{mA}$	-	-	5	ns

**Notes:** 1. Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.