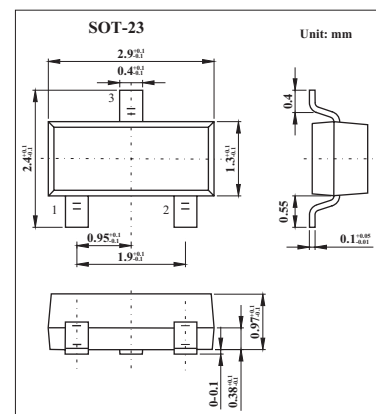


Small Signal Schottky Diodes

KAR46, KAR46A (BAR46, BAR46A)

■ Features

- Very small conduction losses
- Negligible switching losses
- Low forward voltage Drop
- Surface mount device



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

Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	100	V
Average Rectified Forward Current	I_F	150	mA
Power Dissipation	P_D	230	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Operating Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_R	$I_R = 100 \mu\text{A}, T_J = 25^\circ\text{C}$	100			V
Forward Voltage	V_F	$I_F = 0.1\text{mA}, T_J = 25^\circ\text{C}$			0.25	V
		$I_F = 10\text{mA}, T_J = 25^\circ\text{C}$			0.45	
		$I_F = 250\text{mA}, T_J = 25^\circ\text{C}$			1	
Reverse Current	I_R	$T_J = 25^\circ\text{C}, V_R = 1.5\text{V}$			0.5	μA
		$T_J = 60^\circ\text{C}, V_R = 1.5\text{V}$			5	
		$T_J = 25^\circ\text{C}, V_R = 10\text{V}$			0.8	
		$T_J = 60^\circ\text{C}, V_R = 10\text{V}$			7.5	
		$T_J = 25^\circ\text{C}, V_R = 50\text{V}$			2	
		$T_J = 60^\circ\text{C}, V_R = 50\text{V}$			15	
		$T_J = 25^\circ\text{C}, V_R = 75\text{V}$			5	
		$T_J = 60^\circ\text{C}, V_R = 75\text{V}$			20	
Junction Capacitance	C_j	$T_J = 25^\circ\text{C}, V_R = 0\text{V}, f = 1.0\text{MHz}$		10		pF
		$T_J = 25^\circ\text{C}, V_R = 1\text{V}, f = 1.0\text{MHz}$		6		

■ Marking

NO.	KAR46	KAR46A
Marking	S46	A46