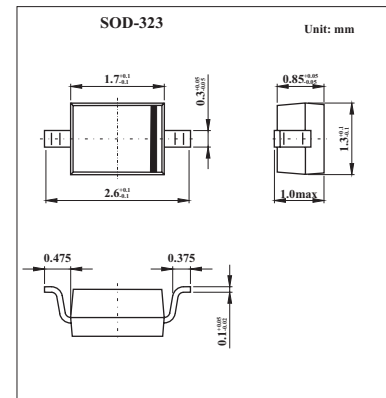


Surface Mount Schottky Barrier Diode

KAS40WS(BAS40WS)

■ Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application



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

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Forward Surge Current @ $t < 1.0\text{s}$	I_{FSM}	600	mA
Power Dissipation	P_d	200	mW
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	@ $I_R = 10\text{ }\mu\text{A}$	40			V
Forward Voltage	V_F	@ $I_F = 1.0\text{mA}$, $t < 300\text{ }\mu\text{s}$			380	mV
		@ $I_F = 10\text{mA}$, $t < 300\text{ }\mu\text{s}$			500	
		@ $I_F = 40\text{mA}$, $t < 300\text{ }\mu\text{s}$			1000	
Reverse Leakage Current	I_R	@ $V_R = 30\text{V}$, $t < 300\text{ }\mu\text{s}$		20	200	nA
Junction Capacitance	C_j	$V_R = 0\text{V}$, $f = 1.0\text{MHz}$		4.0	5.0	pF
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $R_L = 100\text{ }\Omega$			5.0	nS

■ Marking

Marking	S40
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