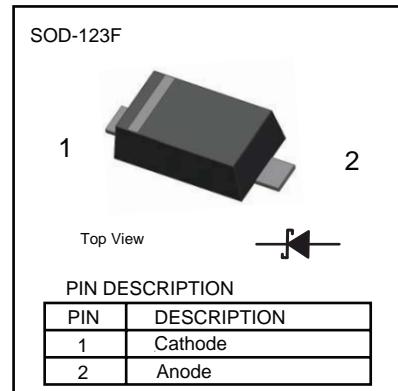


Schottky Diodes

BAT46W (KAT46W)

■ Features

- High Breakdown Voltage
- Low Turn-on Voltage
- Guard Ring Construction for Transient Protection



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V _{RRM}		V
Working Peak Reverse Voltage	V _{RWM}	100	
DC Blocking Voltage	V _R		
Forward Current	I _F	150	
Peak Forward Surge Current@ tp < 1.0s, Duty Cycle < 50% (Note.1)	I _{FM}	350	mA
Forward Surge Forward Current @ t _p =10ms (Note.1)	I _{FSM}	750	
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θ JA}	420	°C/W
		370	
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

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

Note.2: Part mounted on Polymide board with recommended pad layout

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _R	I _R = 100 uA	100			V
Forward voltage	V _F	I _F = 0.1 mA			0.25	
		I _F = 10 mA			0.45	
		I _F = 250 mA			1	
Reverse voltage leakage current	I _{R1}	V _R = 1.5 V			0.3	uA
	I _{R2}	V _R = 10 V			0.5	
	I _{R3}	V _R = 50 V			1	
	I _{R4}	V _R = 75 V			2	
Total capacitance	C _T	V _R = 0 V, f= 1 MHz		20		pF
		V _R = 1 V, f= 1 MHz		12		

■ Marking

Marking	S110
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Schottky Diodes

BAT46W (KAT46W)

■ Typical Characteristics

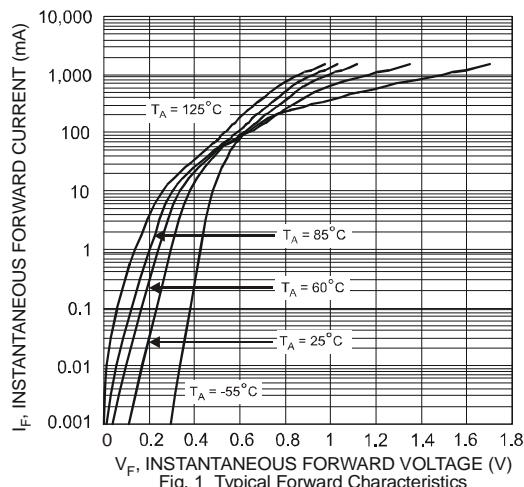


Fig. 1 Typical Forward Characteristics

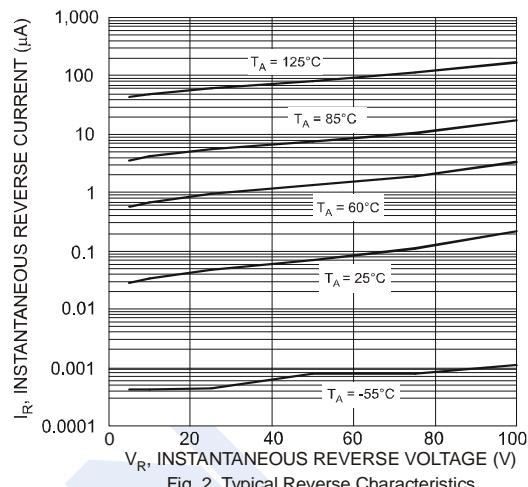


Fig. 2 Typical Reverse Characteristics

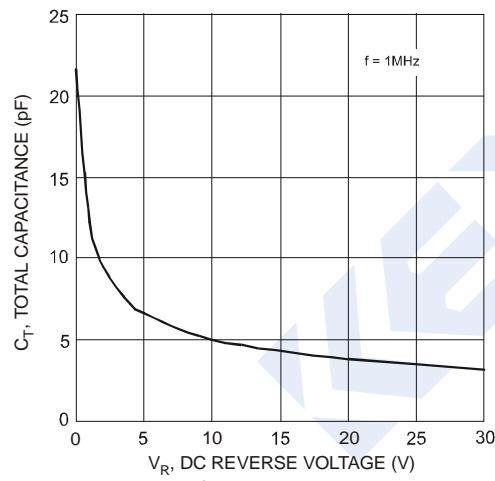


Fig. 3 Total Capacitance vs. Reverse Voltage

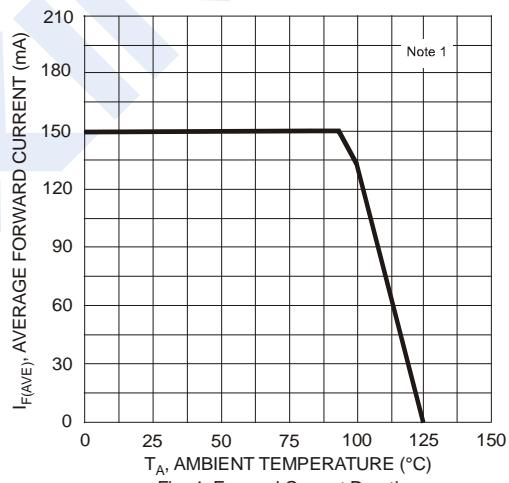


Fig. 4 Forward Current Derating

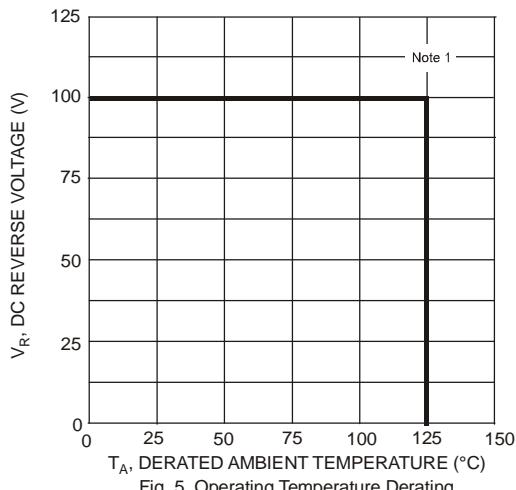


Fig. 5 Operating Temperature Derating

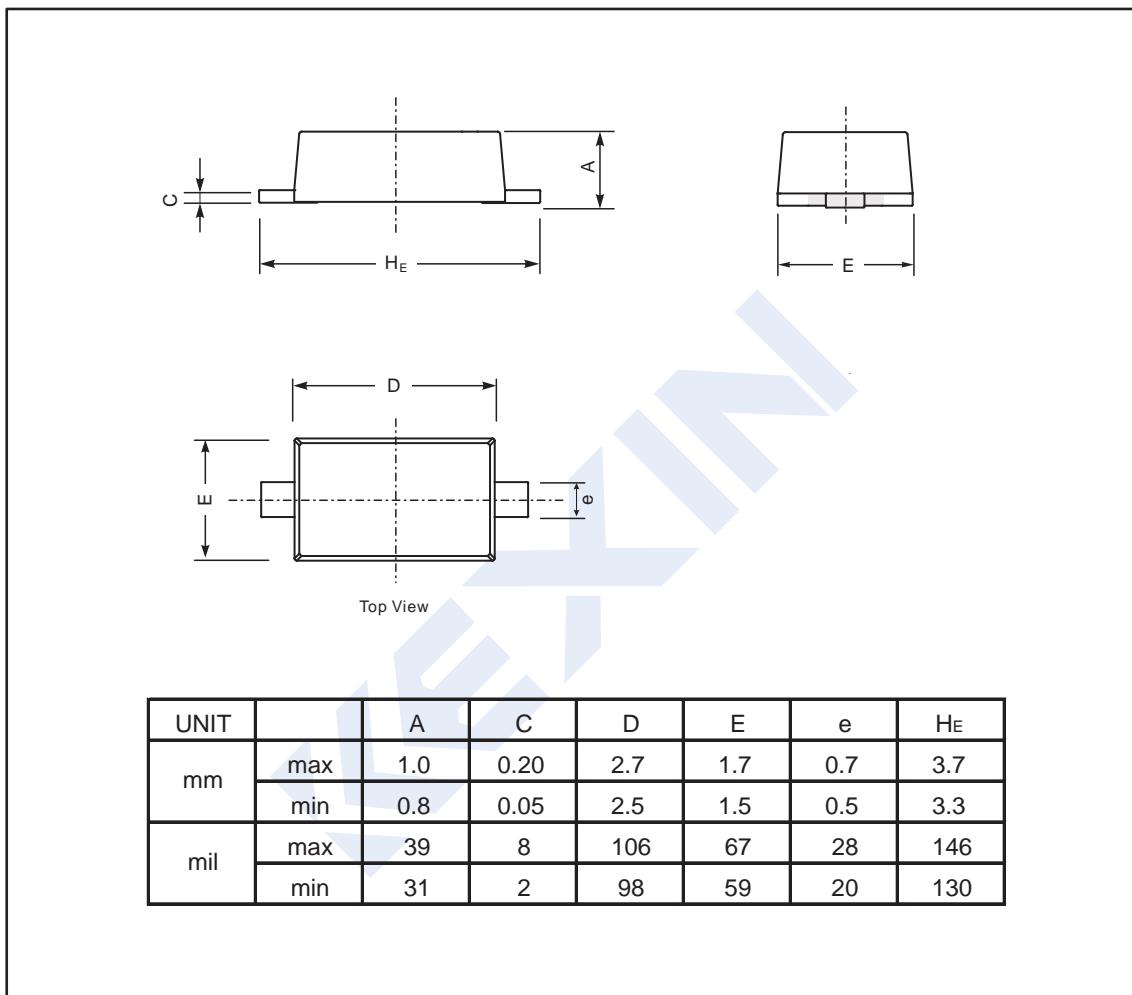
Schottky Diodes

BAT46W (KAT46W)

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123F



■ The Recommended Mounting Pad Size

