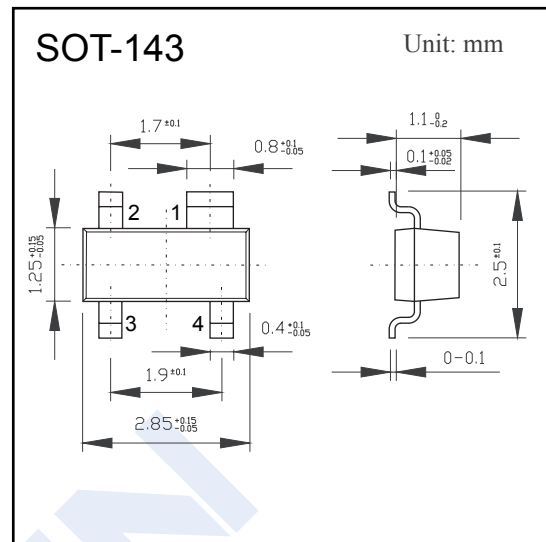
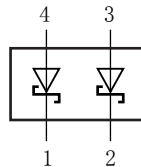


## Schottky Diodes

## BAS40-07 (KAS40-07)

## ■ Features

- High switching speed
- High breakdown voltage
- Low leakage current
- Low capacitance



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	V <sub>RM</sub>	40	V
Forward Current	I <sub>F</sub>	120	mA
Peak Forward Surge Current	I <sub>FM</sub>	120	
Non-Repetitive Peak Forward Current @ tp ≤ 10 ms	I <sub>FSM</sub>	200	
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-65 to 150	

## ■ Electrical Characteristics Ta = 25°C

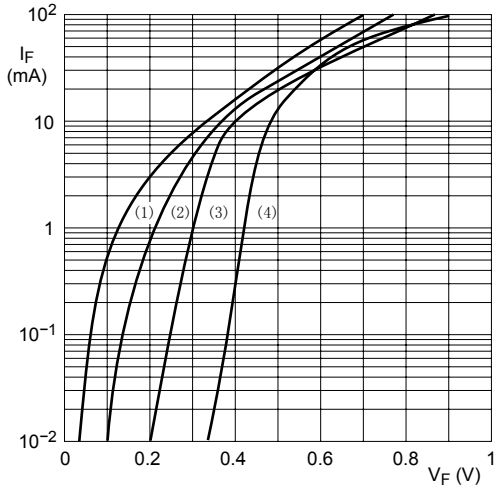
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> = 1 mA			380	mV
	V <sub>F2</sub>	I <sub>F</sub> = 10 mA			500	
	V <sub>F3</sub>	I <sub>F</sub> = 40 mA			1	V
Reverse voltage leakage current	I <sub>R1</sub>	V <sub>R</sub> = 30 V			1	μA
	I <sub>R2</sub>	V <sub>R</sub> = 40 V			10	
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> = 0 V, f = 1 MHz			5	pF

## ■ Marking

Marking	47*
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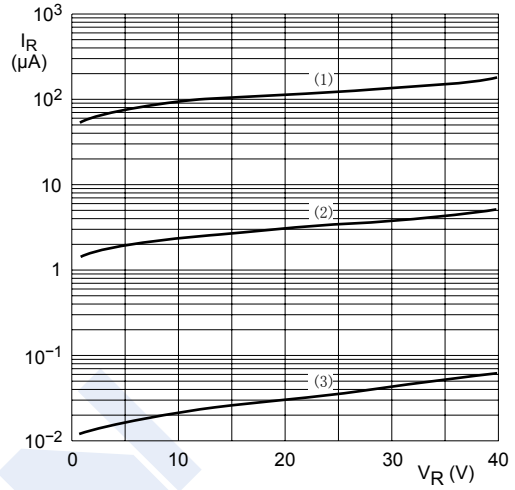
## Schottky Diodes BAS40-07 (KAS40-07)

■ Typical Characteristics



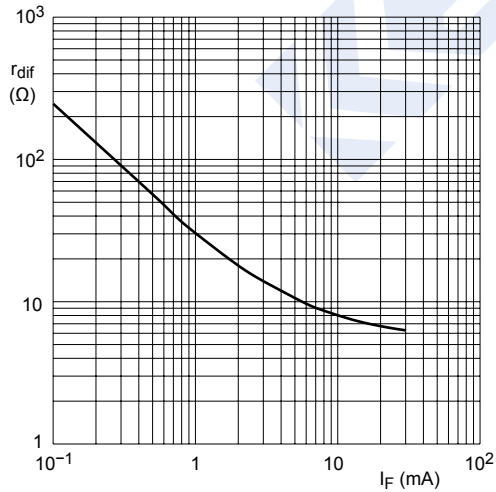
- (1)  $T_{amb} = 125\text{ °C}$
- (2)  $T_{amb} = 85\text{ °C}$
- (3)  $T_{amb} = 25\text{ °C}$
- (4)  $T_{amb} = -40\text{ °C}$

**Fig 1. Forward current as a function of forward voltage; typical values**



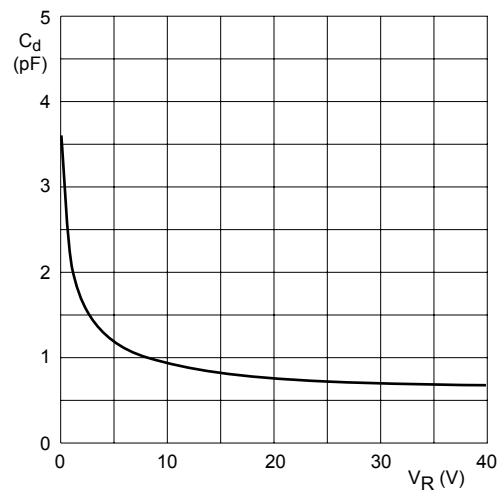
- (1)  $T_{amb} = 125\text{ °C}$
- (2)  $T_{amb} = 85\text{ °C}$
- (3)  $T_{amb} = 25\text{ °C}$

**Fig 2. Reverse current as a function of reverse voltage; typical values**



$f = 10\text{ kHz}$

**Fig 3. Differential resistance as a function of forward current; typical values**



$T_{amb} = 25\text{ °C}; f = 1\text{ MHz}$

**Fig 4. Diode capacitance as a function of reverse voltage; typical values**