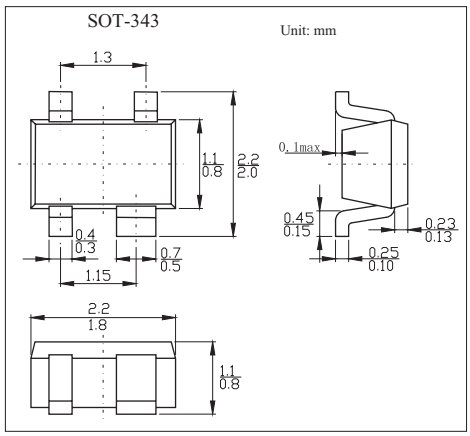
Silicon Schottky Diode

BAS40-07W



Features

- General-purpose diode for high-speed switching
- Circuit protection
- Voltage clamping
- High-level detecting and mixing

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	120	mA
Surge forward current, t ≤ 10 ms	I_{FRM}	200	mA
Total power dissipation, Ts ≤ 81℃	P_{tot}	250	A
Junction temperature	T_j	150	℃
Operating temperature range	T_{op}	-55 to +150	℃
Storage temperature	T_{stg}	-55 to +150	℃
Junction - ambient [1)]	R_{thJA}	≤ 345	K/W
Junction - soldering point	R_{thJS}	≤ 275	K/W
Note			

1.Package mounted on epoxy pcb 40mm × 40mm × 1.5mm / 6cm^2 Cu

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Breakdown voltage	$V_{(BR)}$	$I_{(BR)}$ = 10 μ A	40			mV
Reverse current	I_R	V_R = 30 V			1	μ A
		V_R = 40 V			10	
Forward voltage	V_F	I_F = 1 mA	250	310	380	mV
		I_F = 10 mA	350	450	500	
		I_F = 40 mA	600	720	1000	
Diode capacitance	C_T	f = 1 MHz; V_R = 0		4	5	pF
Charge carrier life time	τ	I_F = 25 mA			100	ps
Differential forward resistance	R_F	I_F = 10 mA, f = 10 KHz		10		Ω

Marking

Marking	47s