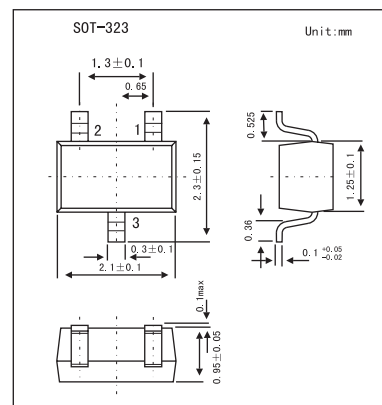


Silicon Schottky Diodes

BAT64W;BAT64-04W
BAT64-05W;BAT64-06W

■ Features

- For low-loss, fast-recovery, meter protection, bias isolation and clamping applications
- Integrated diffused guard ring
- Low forward voltage

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

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	40	V
Forward current	I_F	250	mA
Average forward current (50/60Hz, sinus)	I_{FAV}	120	mA
Surge forward current ($t < 100\text{ms}$)	I_{FSM}	800	mA
Total power dissipation BAT 64W, $T_s \leq 120^\circ\text{C}$	P_{tot}	250	mW
Total power dissipation BAT64-04/06W, $T_s \leq 111^\circ\text{C}$	P_{tot}	250	mW
Total power dissipation BAT 64-05W, $T_s \leq 104^\circ\text{C}$	P_{tot}	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-50 to +150	$^\circ\text{C}$
Junction - ambient (Note 1) BAT 64W	R_{thJA}	≤ 255	K/W
Junction - ambient (Note 1) BAT 64-04/06W	R_{thJA}	≤ 290	
Junction - ambient (Note 1) BAT 64-05W	R_{thJA}	≤ 455	
Junction - soldering point BAT 64W	R_{thJS}	≤ 120	K/W
Junction - soldering point BAT 64-04/06W	R_{thJS}	≤ 155	
Junction - soldering point BAT 64-05W	R_{thJS}	≤ 185	

Note

1.Package mounted on epoxy pcb 40mm × 40mm × 1.5mm / 6cm² Cu

BAT64W;BAT64-04W BAT64-05W;BAT64-06W

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 30\text{ V}$			2	$\mu\text{ A}$
		$V_R = 30\text{ V}, T_A = 85^\circ\text{C}$			200	
Forward voltage	V_F	$I_F = 1\text{ mA}$		320	350	mV
		$I_F = 10\text{ mA}$		380	430	
		$I_F = 30\text{ mA}$		440	520	
		$I_F = 100\text{ mA}$		570	750	
Diode capacitance	C_T	$V_R = 1\text{ V}, f = 1\text{ MHz}$		4	6	pF

■ Marking

Type	BAT64W	BAT64-04W	BAT64-05W	BAT64-06W
Marking	63s	64s	65s	66s