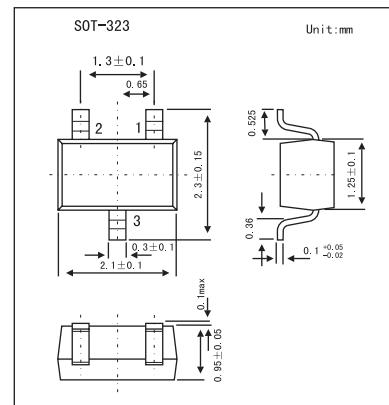


## Silicon Schottky Diodes

### 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 BAR 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	$R_{thJA}$	$\leq 255$	K/W
Junction - ambient (Note 1) BAT 64-04/06W	$R_{thJA}$	$\leq 290$	
Junction - ambient (Note 1) BAT 64-05W	$R_{thJA}$	$\leq 455$	
Junction - soldering point BAT 64W	$R_{thJS}$	$\leq 120$	K/W
Junction - soldering point BAT 64-04/06W	$R_{thJS}$	$\leq 155$	
Junction - soldering point BAT 64-05W	$R_{thJS}$	$\leq 185$	

Note

1. Package mounted on epoxy pcb 40mm  $\times$  40mm  $\times$  1.5mm / 6cm<sup>2</sup> 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	$\text{mV}$
		$I_F = 10 \text{ mA}$		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	$\text{pF}$

## ■ Marking

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