

BAT42W, BAT43W Surface Mount Schottky Barrier Diodes

Features

* Low Forward Voltage Drop

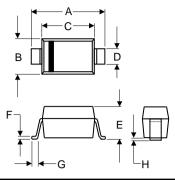
* Fast Switching

* Marking Code: BAT42W: PX Marking Code: BAT43W: PY









SOD-123					
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
Α	0.138	0.150	3.50	3.80	
В	0.059	0.067	1.50	1.70	
С	0.100	0.106	2.54	2.70	
D	0.020	0.028	0.50	0.70	
Е	0.036	0.048	0.91	1.21	
F	0.003	0.008	0.08	0.20	
G	0.008	0.016	0.20	0.40	
Н		0.004		0.10	

Maximum Ratings (T_A=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	Vrrm	30	V
Reverse Voltage	VR	30	V
Forward Continuous Current	lғм	200	mA
Repetitive Peak Forward Current at t < 1 s	IFRM	500	mA
Non-repetitive Peak Forward Surge Current at t < 10 ms	Iгsм	2	Α
Power Dissipation	P _{tot}	200	mW
Thermal Resistance Junction to Ambient	RеJA	500	°C/W
Operating and Storage Temperature Range	TJ/TStg	- 55 to + 125	$^{\circ}\! \mathbb{C}$

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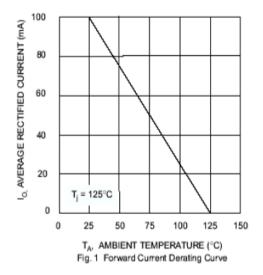


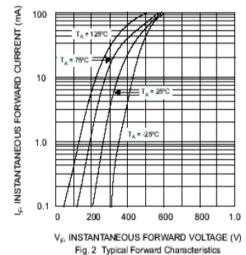
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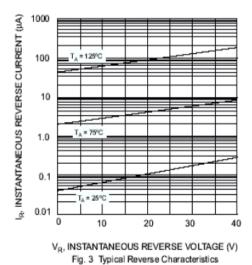
Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	30	_	V
at I _R = 100 μA	V (BK)K	30		V
Reverse Current	l l _R	_	500	nA
at V _R = 25 V	IK	_	300	ПА
Forward Voltage				
at I _F = 200 mA		-	1	
at I _F = 10 mA BAT42W	VF	-	0.4	V
at I _F = 50 mA BAT42W	VF	-	0.65	V
at I _F = 2 mA BAT43W		0.26	0.33	
at I _F = 15 mA BAT43W		-	0.45	
Total Capacitance	Ст		10	n.E
at $V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$	Ci		10	pF
Reverse Recovery Time	trr		5	ns
at IF = IR = 10 mA, Irr = 0.1 X IR, RL = 100 Ω	trr	_	,	115

Ratings and Characteristic Curves







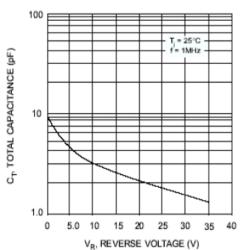


Fig. 4 Total Capacitance vs. Reverse Voltage

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Ordering Information

Part No.	Package	Packing Code	Packing
BAT42W, BAT43W	SOD-123	R30	3000pcs/Reel

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