# SMD Type

### Diodes

### SURFACE MOUNT SCHOTTKY BARRIER DIODE

## BAT42WS / BAT43WS

#### Features

- Low Switching
- Fast Switching
- PN Junction Gurad Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material UL Recognition Flammability Clsaaification 94V-O

#### ■ Absolute Maximum Ratings Ta = 25°C

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage		Vrrm		
Working Peak Reverse Voltage	Vrwm	30	V	
DC Blocking Volatge		Vr		
Forward Continuous Current (Note 1)		lf	200	mA
Rectified Peak Forward Current (Note 1)	@ T < 1.0s	IFSM	500	mA
Non-Repetitive Peak Forward Current	@ t < 10ms	IFSM	4.0	А
Power Dissipation	Pd	200	mW	
Typical Thermal Resistance, Junction to Ambient Air (Note 1)		Reja	625	K/W
Operating and Storage Temperature Range		Тј ,Тѕтс	-55 to+125	°C

Note:

1. Valid provided that terminals are kept at ambient temperature.

### ■ Electrical Characteristics Ta = 25°C

Character	istic	Symbol	Test Condition	Min	Тур	Max	Unit
Reverse Breakdown Voltage		V(BR)R	@ IRS = 100 µ A	30			V
Forward Voltage	BAT42WS	VF	@ IF = 1.0 mA			0.4	V
	BAT42WS		@ IF = 200 mA			1.0	
	BAT43WS		@ IF = 2.0 mA			0.33	
	BAT43WS		@ IF = 200 mA			1.0	
Reverse Leakage Curren	t	IR	@ VR =25 V			0.5	μ Α
Junction Capacitance		Cj	VR = 1.0 V, f = 1.0 MHz			10	pF
Reverse Recovery Time		trr	IF = IR = 10 mA IRR = 0.1 x IR, RL = 100 Ω			5.0	nS

#### Marking

Туре	BAT42WS	BAT43WS
Marking	L2	L3

