

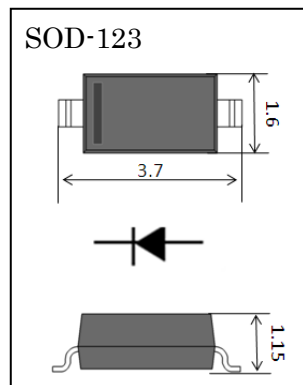
SCHOTTKY BARRIER DIODE / DATA SHEET

BAT42W BAT43W

- ◇ Low Forward Voltage Schottky Rectifier
- ◇ RoHS compliant / Green EMC
- ◇ SOD123-GW Thin SMD package
- ◇ Matte Tin (Sn) Lead finish
- ◇ Cathode Band / Device marking

Device Marking Code

BAT42W	S7
BAT43W	S8



Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
V_{RRM}	Peak Repetitive Peak Reverse Voltage Working		
V_{RM}	Peak Reverse Voltage	30	V
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	21	V
I_{FM}	Forward continuous current	200	mA
I_{FSM}	Repetitive peak forward current @t<1.0s	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current *1	4.0	A
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	mW/°C
T_J	Junction Temperature	125	°C
T_{STG}	Storage Temperature	-65 to +125	°C

*1 8.3 ms single half sine-wave

Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{BR}	Reverse breakdown voltage	$I_R=100\mu A$	30			V
V_F	Forward Voltage	Both Types			1.0	V
		BAT42WX			0.40	
		BAT42WX			0.65	
		BAT43WX	0.26		0.33	
		BAT43WX			0.45	
I_R	Reverse Current	$V_R = 25V$			500	nA
C_T	Capacitance	$V_R = 1V, f = 1MHz$			10	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10mA$ $I_{rr}=0.1 I_R$ $R_L=100\Omega$			5.0	ns

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAT42W BAT43W	SOD123	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

Package Dimensions

