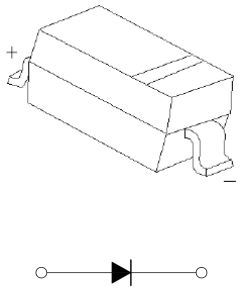
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOD-123 Plastic-Encapsulate Diodes

BAT42W/BAT43W SCHOTTKY BARRIER DIODE

SOD-123



FEATURES

- **Low Forward Voltage Drop**
- **Fast Switching Time**
- **Surface Mount Package Ideally Suited for Automatic Insertion**

MARKING: BAT42W S7
BAT43W S8

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

Parameter	Symbol	BAT42W/BAT43W	Unit
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltag DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current @t<1.0s	I_{FRM}	500	mA
Peak Forward Surge Current @t<10ms	I_{FSM}	4.0	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	℃/W
Junction temperature	T_J	125	℃
Storage Temperature	T_{STG}	-55~+150	℃

Electrical Ratings @Ta=25℃

Parameter		Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage		$V_{(BR)}$	30			V	IR=10μA
Forward voltage	All Types	V_F			1.0	V	I_F=200mA
	BAT42W	V_F			0.4	V	I_F=10mA
	BAT42W	V_F			0.65	V	I_F=50mA
	BAT43W	V_F	0.26		0.33	V	I_F=2mA
	BAT43W	V_F			0.45	V	I_F=15mA
Reverse current		I_R			0.5	μA	V_R=25V
Capacitance between terminals		C_T			10	pF	V_R=1.0V,f=1.0MHz
Reverse recovery time		t_{rr}			5	ns	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

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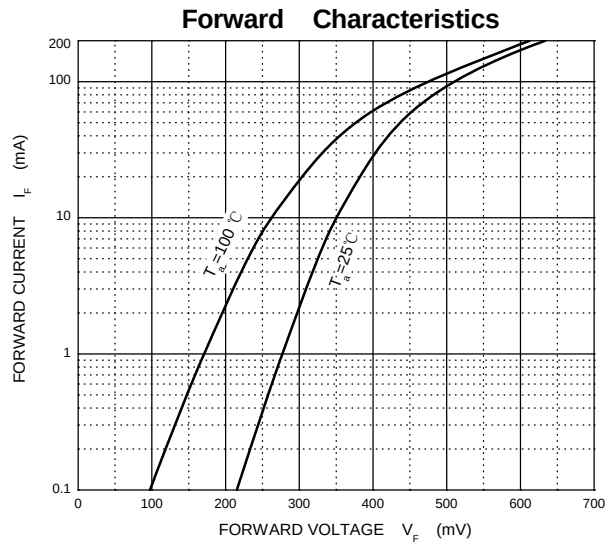
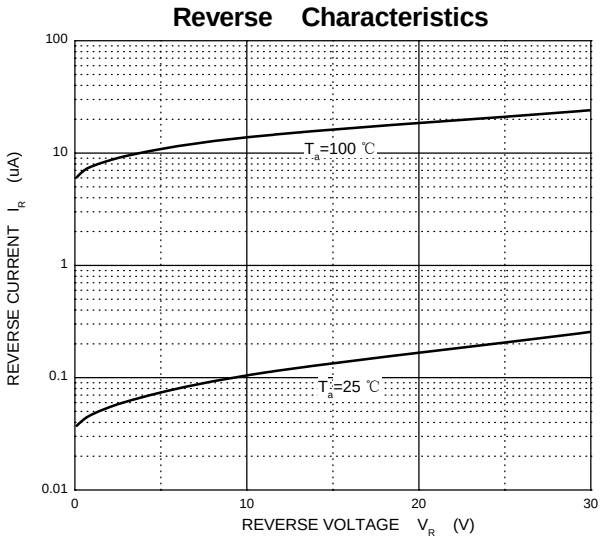
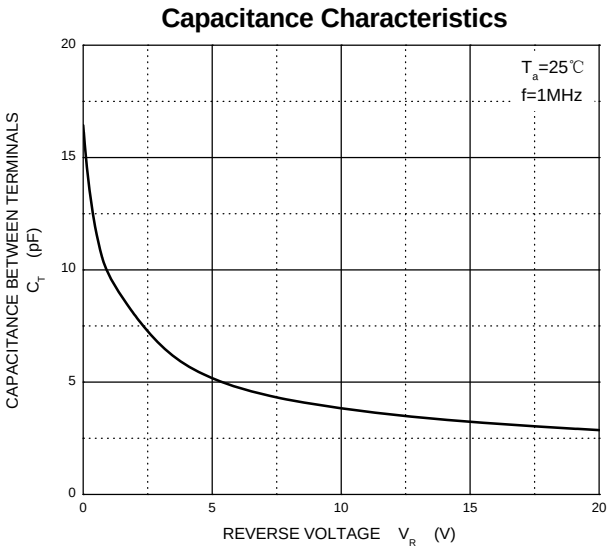
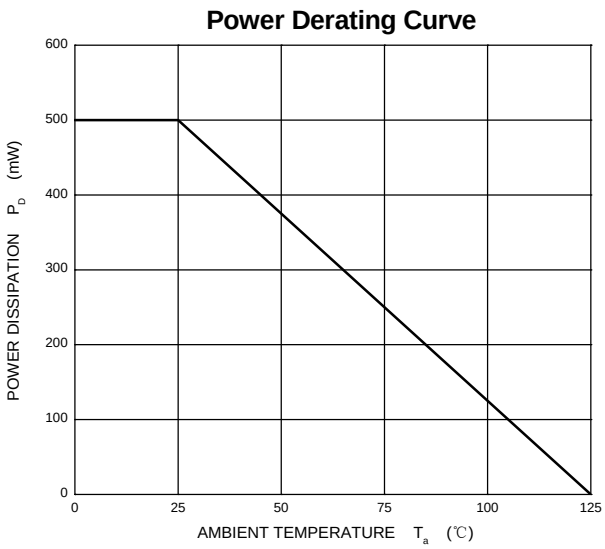
Typical Characteristics BAT43W









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