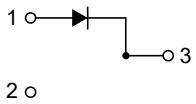
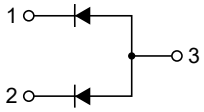
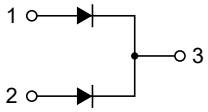
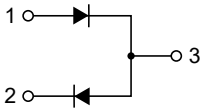
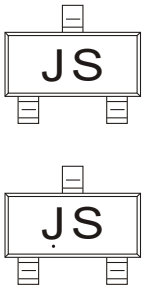
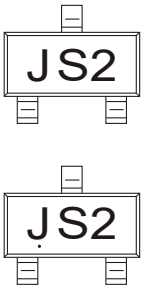
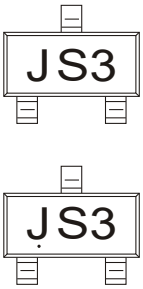
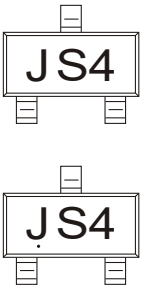
UMW BAS21/A/C/S

SOT-23 Plastic-Encapsulate Transistors

1.Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

2.Pinning Information

BAS21	BAS21A	BAS21C	BAS21S
			
MARKING: JS	**MARKING: JS2**	**MARKING: JS3**	**MARKING: JS4**
			

Solid dot = Green molding compound device, if none, the normal device

3.Limiting Service Range

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	250	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
Forward continuous current	I_{FM}	400	mA
Average rectified output current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.5	A
Repetitive peak forward surge current	I_{FRM}	625	mA
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	555	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to 150	°C

4.Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Max	Units
Reverse breakdown voltage	$V_{(BR)}$	I_R=100μA	250		V
Reverse voltage leakage current	I_R	V_R=200V		0.1	μA
Forward voltage	V_F	I_F=100mA		1000	mV
		I_F=200mA		1250	mV
Diode capacitance	C_D	V_R=0V, f=1MHz		5	pF
Reveres recovery time	t_{rr}	I_F=I_R=30mA, I_{rr}=0.1×I_R, R_L=100Ω		50	ns

5.Typical Characteristic

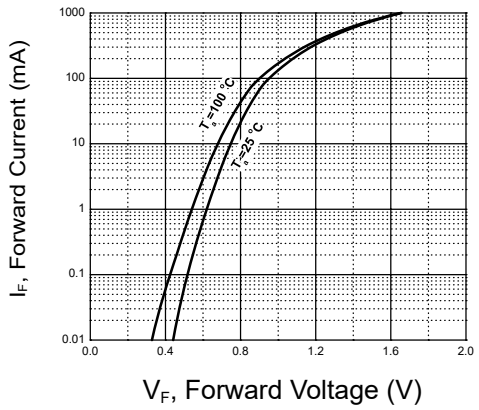


Figure 1: Forward Characteristics

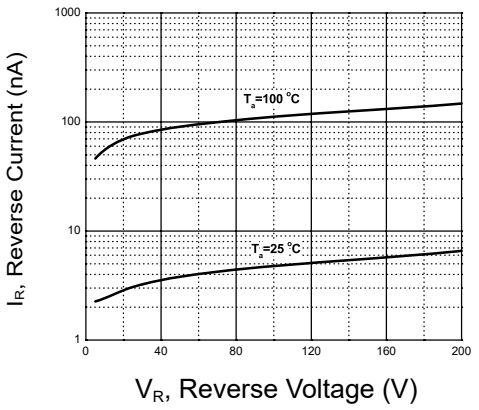


Figure 2: Reverse Characteristics

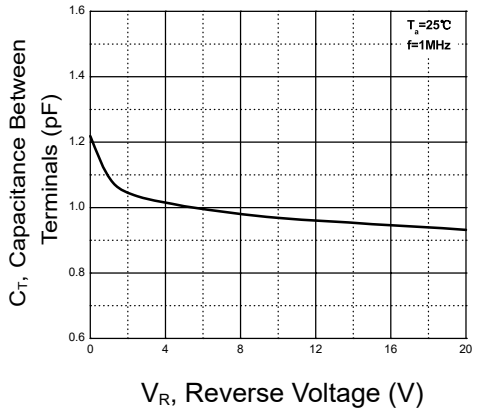


Figure 3: Capacitance Characteristics

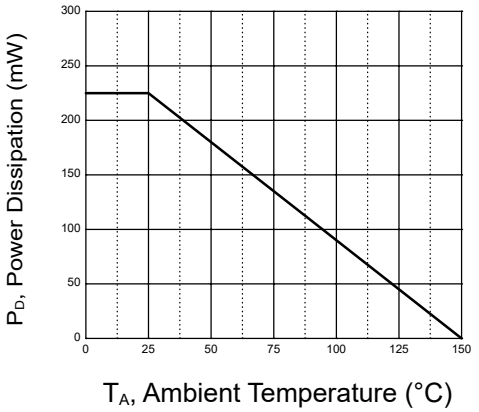
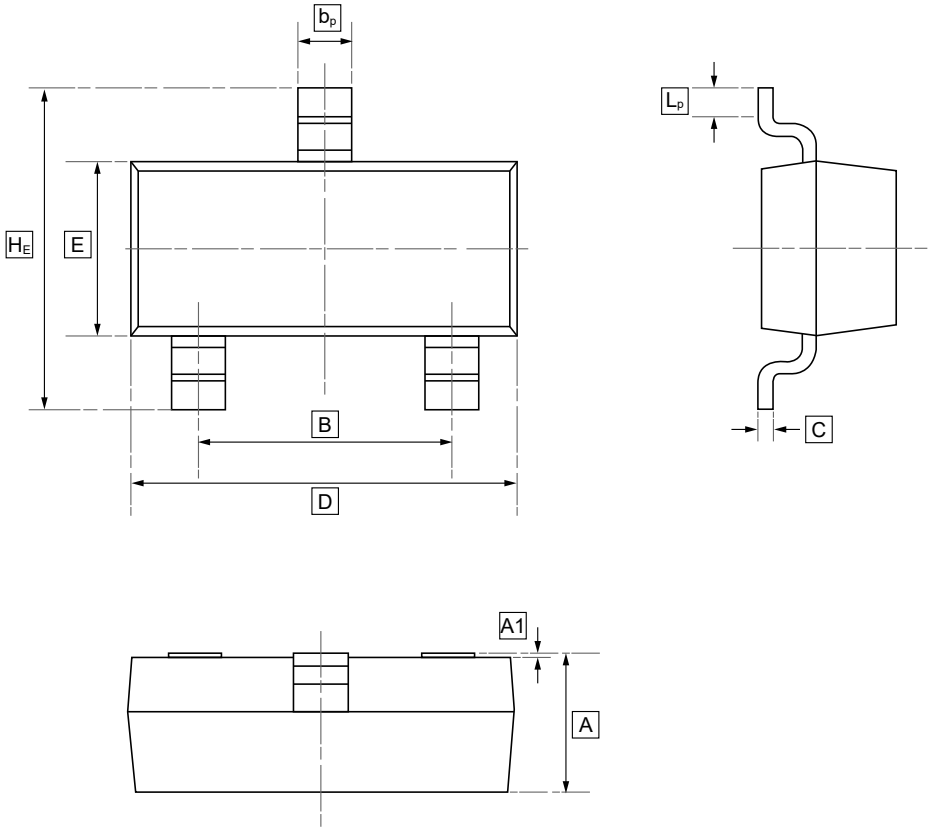


Figure 4: Power Derating Curve

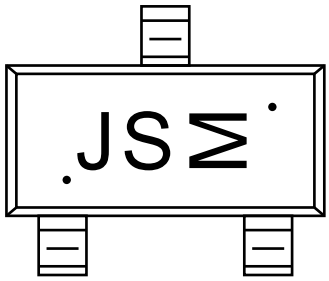
6.SOT-23 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	B	b_p	C	D	E	H_E	A1	L_p
Min	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20
Max	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50

7.Ordering Information



Order Code	Marking	Package	Base QTY	Delivery Mode
UMW BAS21	JS	SOT-23	3000	Tape and reel
UMW BAS21A	JS2	SOT-23	3000	Tape and reel
UMW BAS21C	JS3	SOT-23	3000	Tape and reel
UMW BAS21S	JS4	SOT-23	3000	Tape and reel

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