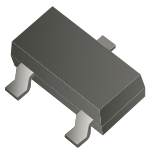
ABAV99W-HF

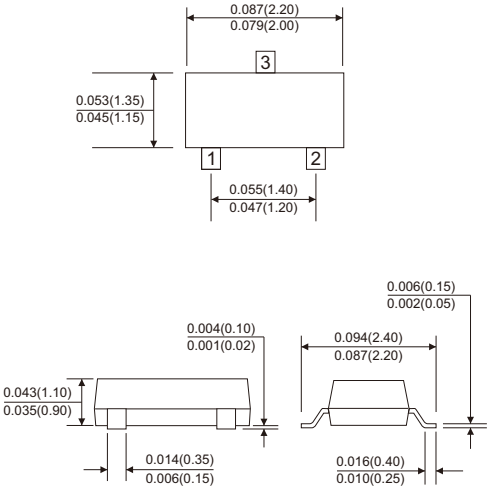
Reverse Voltage: 75 Volts
Forward Current: 215 mA
RoHS Device
Halogen Free



Features

- Fast switching speed.
- High conductance.
- Connected in series.
- Surface mount package ideally suited for automatic insertion.
- AEC-Q101 Qualified.

SOT-323

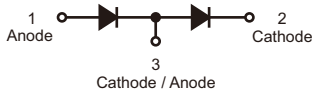


Dimensions in inches and (millimeter)

Mechanical data

- Case: SOT-323, molded plastic.

Circuit Diagram



Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	75	V
DC reverse voltage	V_R	75	V
RMS reverse voltage	$V_{R(RMS)}$	53	V
Non-repetitive forward surge current @ t=1.0s @ t=1.0ms @ t=1.0μs	I_{FSM}	0.5 1.0 2.0	A
Peak forward surge current (Note 1)	$I_{FM(surge)}$	300	mA
Repetitive peak forward surge current	I_{FRM}	450	mA
Forward continuous current	I_F	215	mA
Average rectified forward current (averaged over any 20ms period)	$I_{F(AV)}$	715	mA
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	625	°C/W
Operating and storage temperature range	T_J, T_{STG}	-65 to +150	°C

Notes: 1. Device mounted on FR-4 PC board with recommended pad layout.

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_{(BR)}$ = 100μA	75		V
Reverse voltage leakage current	I_R	V_R = 75V		2.5	μA
Forward voltage	V_F	I_F = 1mA I_F = 10mA I_F = 50mA I_F = 150mA		715 855 1000 1250	mV
Diode capacitance	C_D	V_R = 0V, f = 1MHz		1.5	pF
Reverse recovery time	t_{rr}	I_F = I_R = 10mA, R_L = 100Ω		6.0	nS
Forward recovery voltage	V_{FR}	I_F = 10mA, t_r = 20ns		1.75	V

Rating and Characteristic Curves (ABAV99W-HF)

Fig.1 - Forward Voltage

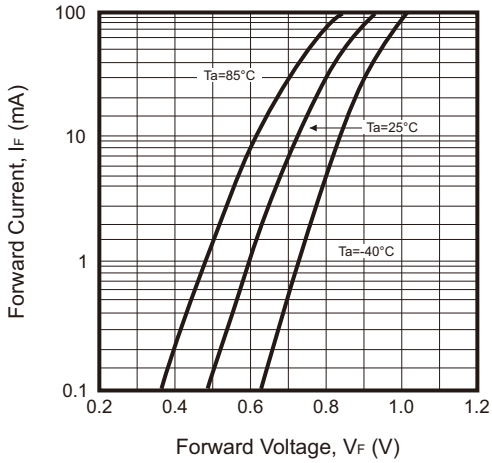


Fig.2 - Leakage Current

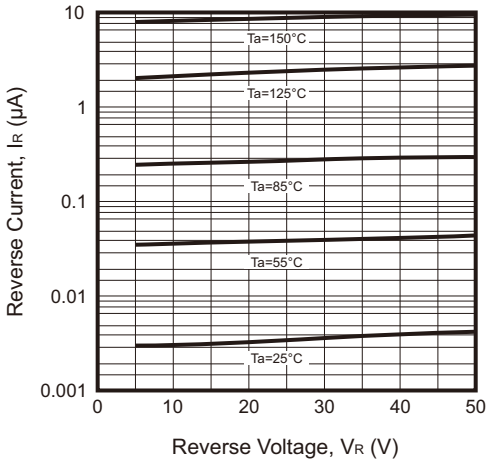
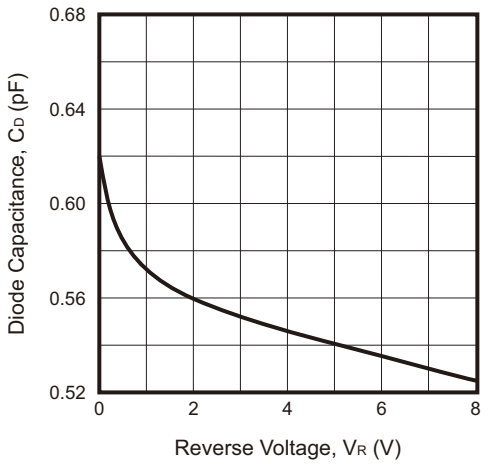
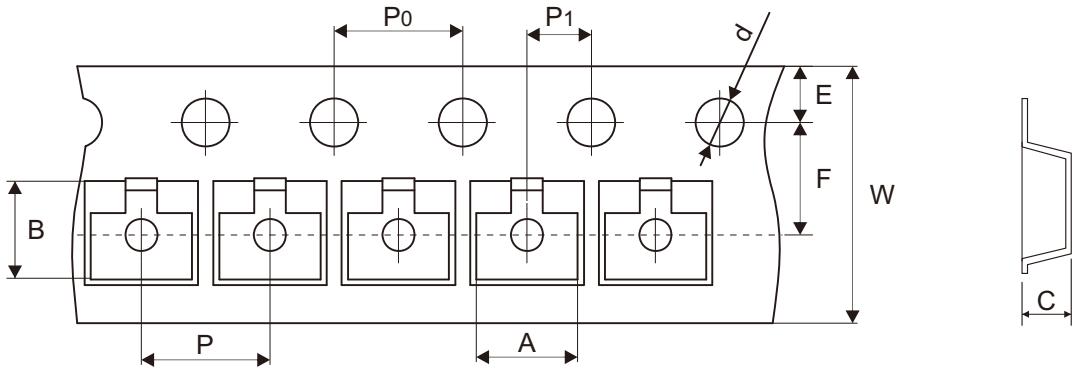


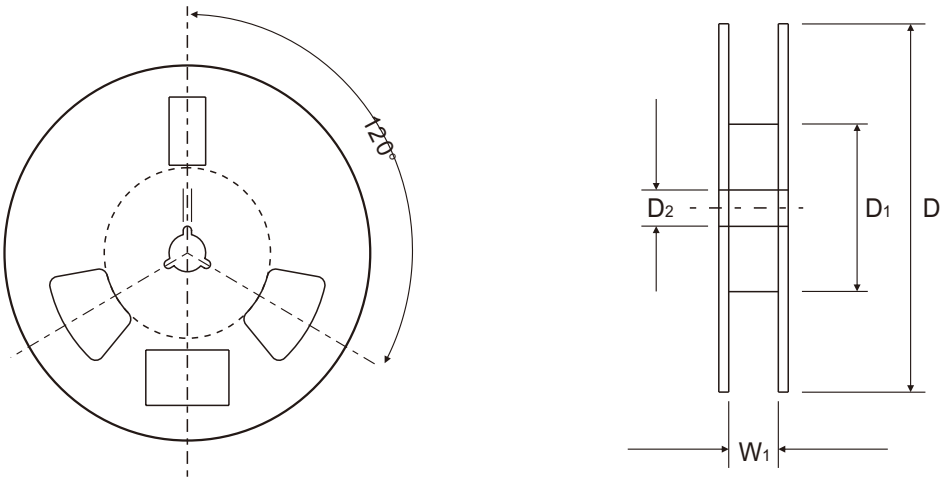
Fig.3 - Capacitance

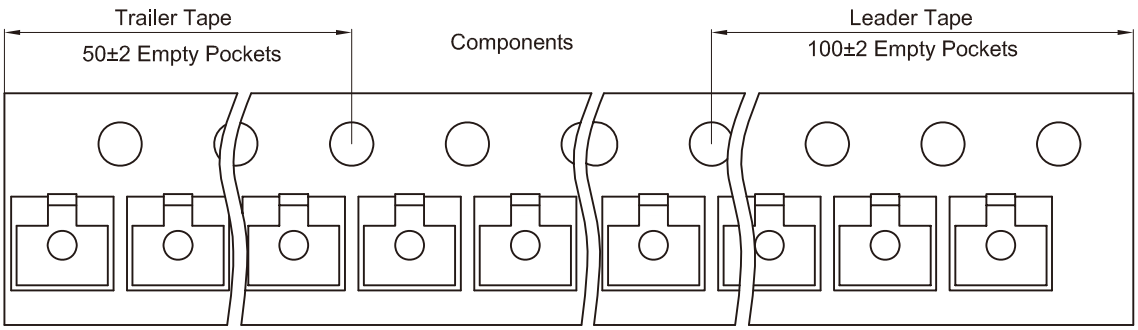


Company reserves the right to improve product design , functions and reliability without notice.

Reel Taping Specification





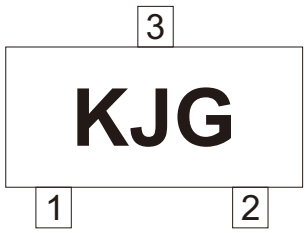


	SYMBOL	A	B	C	d	D	D_1	D_2
SOT-323	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.20 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

	SYMBOL	E	F	P	P_0	P_1	W	W_1
SOT-323	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 − 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 − 0.004	0.374 ± 0.039

Marking Code

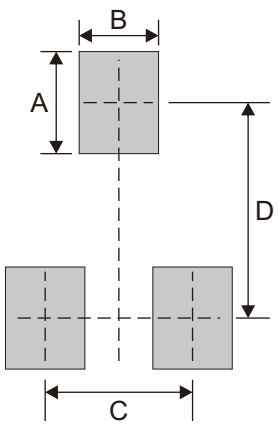
Part Number	Marking Code
ABAV99W-HF	KJG



Suggested PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.90	0.035
B	0.70	0.028
C	1.30	0.051
D	1.90	0.075

Note: 1.The pad layout is for reference purposes only.



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-323	3,000	7