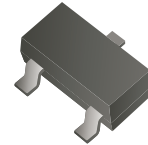


ABAS40-xx-HF Series

RoHS Device
Halogen Free



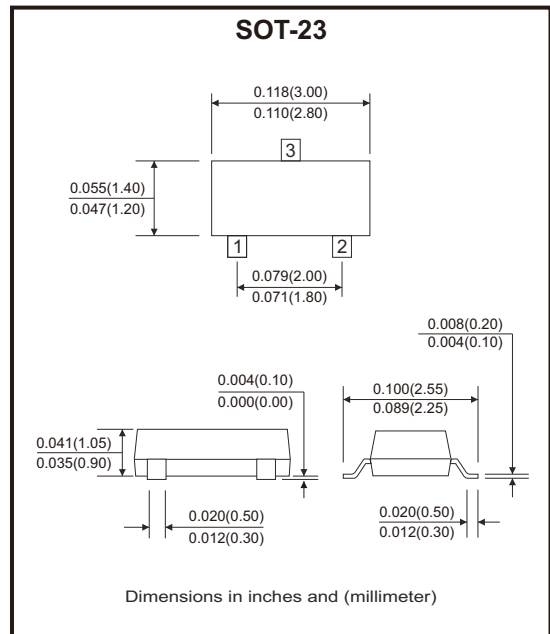
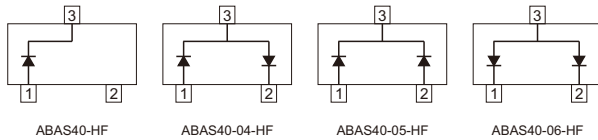
Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- Low forward voltage schottky rectifier.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V _{RRM}	40	V
Average forward current	I _{FAV}	120	mA
Non-repetitive peak forward surge current	I _{FSM}	0.6	A
Power dissipation	P _D	200	mW
Thermal resistance junction to ambient	R _{θJA}	500	°C/W
Junction temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

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

REV:A

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

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 10\mu A$	40		V
Forward voltage	V_F	$I_F = 1mA$		0.38	V
		$I_F = 40mA$		1.0	
Reverse current	I_R	$V_R = 30V$		0.2	μA
Junction capacitance	C_J	$V_R = 0V, f = 1MHz$		5	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 5mA, I_{rr} = 0.5mA, R_L = 100\Omega$		5	ns

Rating and Characteristic Curves (ABAS40-xx-HF)

Fig.1 - Forward Characteristics

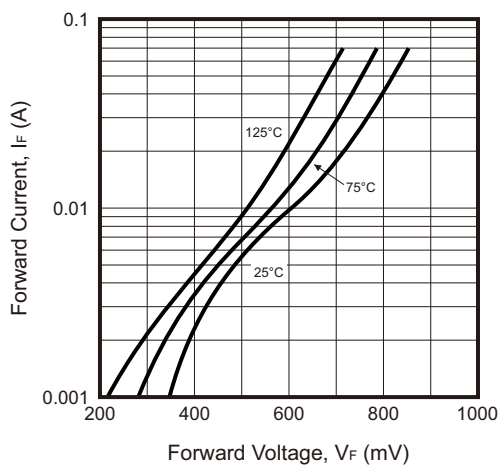


Fig.2 - Reverse Characteristics

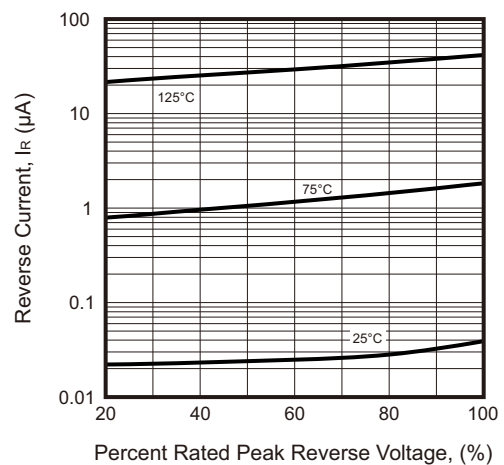
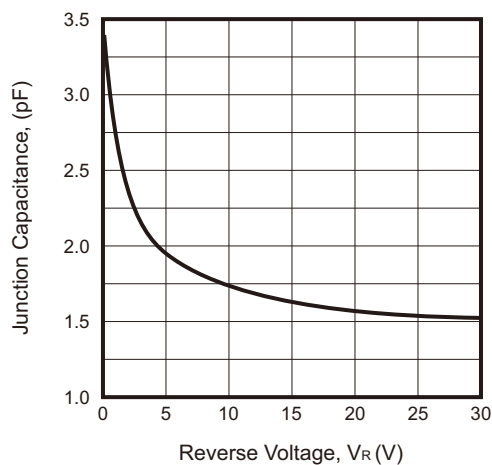


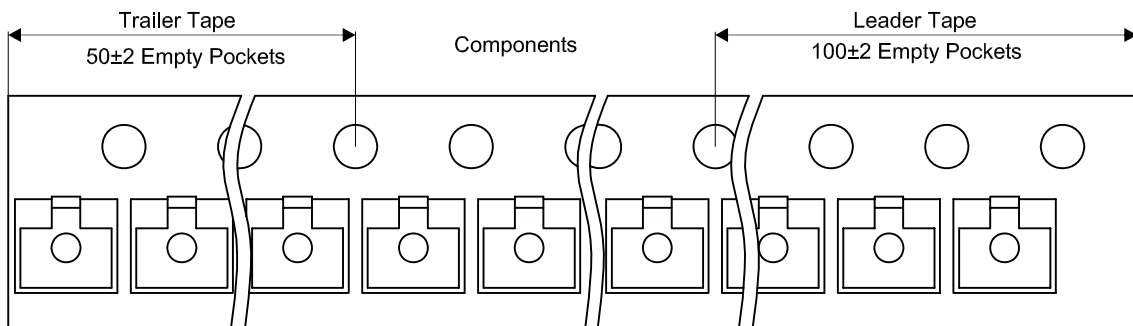
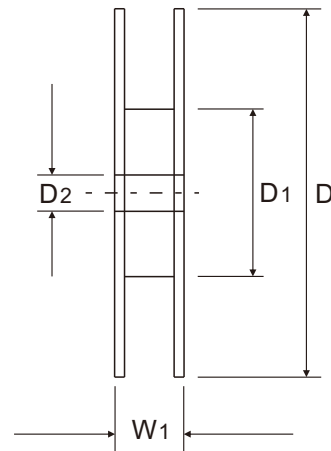
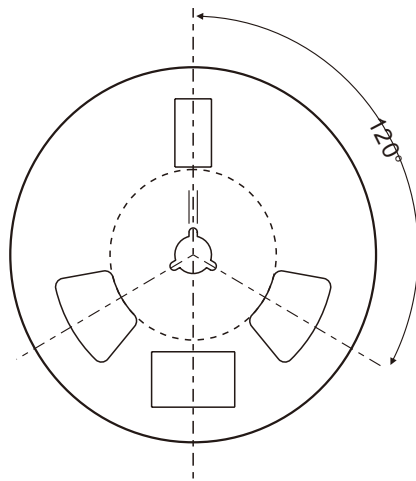
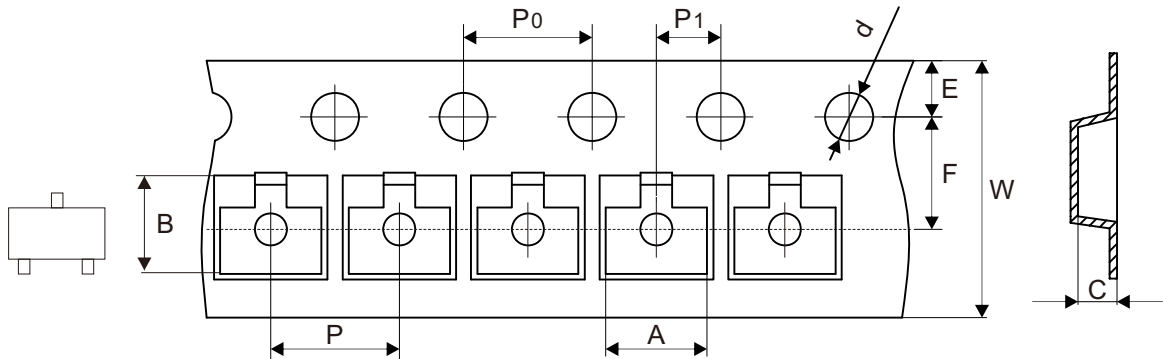
Fig.3 - Junction Capacitance



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REV:A

Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 + 0.10 - 0.00	178.00 ± 1.00	54.60 ± 1.00	13.30 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.150 ± 0.039	0.524 ± 0.039

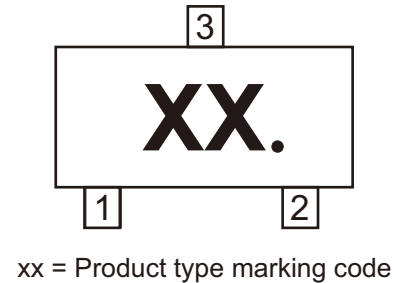
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	11.10 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.437 ± 0.008

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REV:A

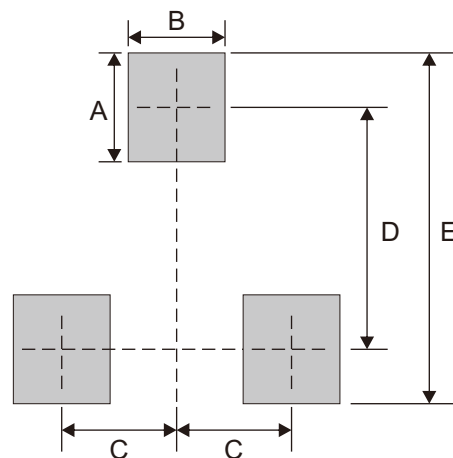
Marking Code

Part Number	Marking Code
ABAS40-HF	43.
ABAS40-04-HF	44.
ABAS40-05-HF	45.
ABAS40-06-HF	46.



Suggested P.C.B. PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.031
C	0.95	0.037
D	2.00	0.079
E	2.90	0.114



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

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7