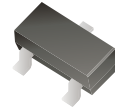


ABAS40WT-xx-HF Series

RoHS Device
Halogen Free



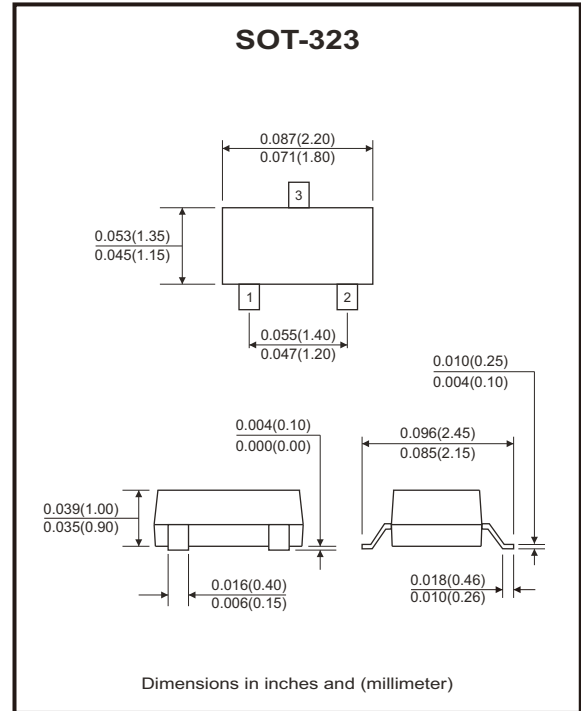
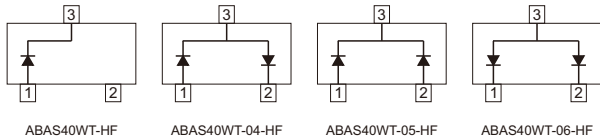
Features

- Epoxy meets UL-94 V-0 flammability rating.
- Ultra high speed switching.
- Low forward voltage schottky rectifier.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.
- Mounting position: Any.

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_o	120	mA
Non-repetitive peak forward surge current square wave $t_p < 10ms$	I_{FSM}	2	A
Power dissipation	P_D	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	°C/W
Junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1\text{mA}$	V_F			0.38	V
	$I_F = 40\text{mA}$				1.0	
Reverse current	$V_R = 30\text{V}$	I_R			0.2	μA
Reverse breakdown voltage	$I_R = 10\mu\text{A}$	V_{BR}	40			V
Junction capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	C_J			5	pF
Reverse recovery time	$I_F = I_R = 10\text{mA}, I_{rr} = 1\text{mA}, R_L = 100\Omega$	t_{rr}			7	ns

Typical Rating and Characteristic Curves (ABAS40WT-xx-HF)

Fig.1 - P_D — T_A

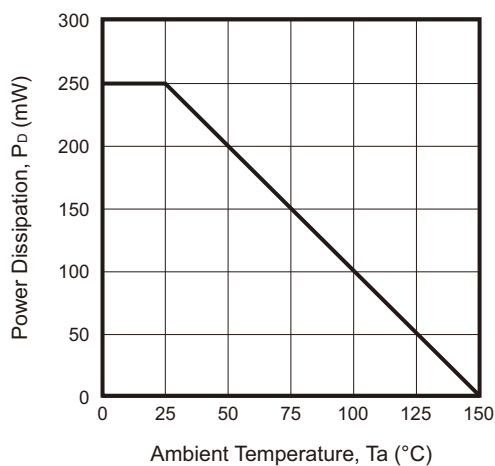


Fig.2 - Capacitance Characteristics

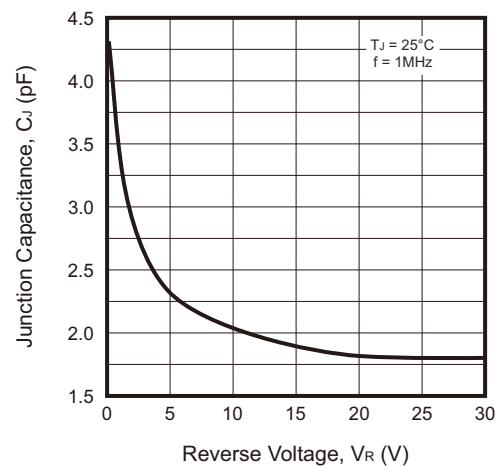


Fig.3 - Forward Characteristics

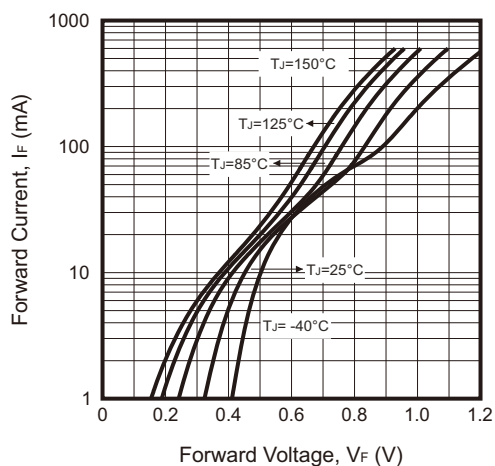
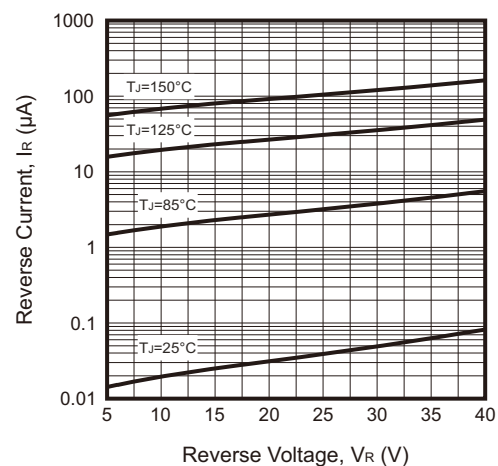
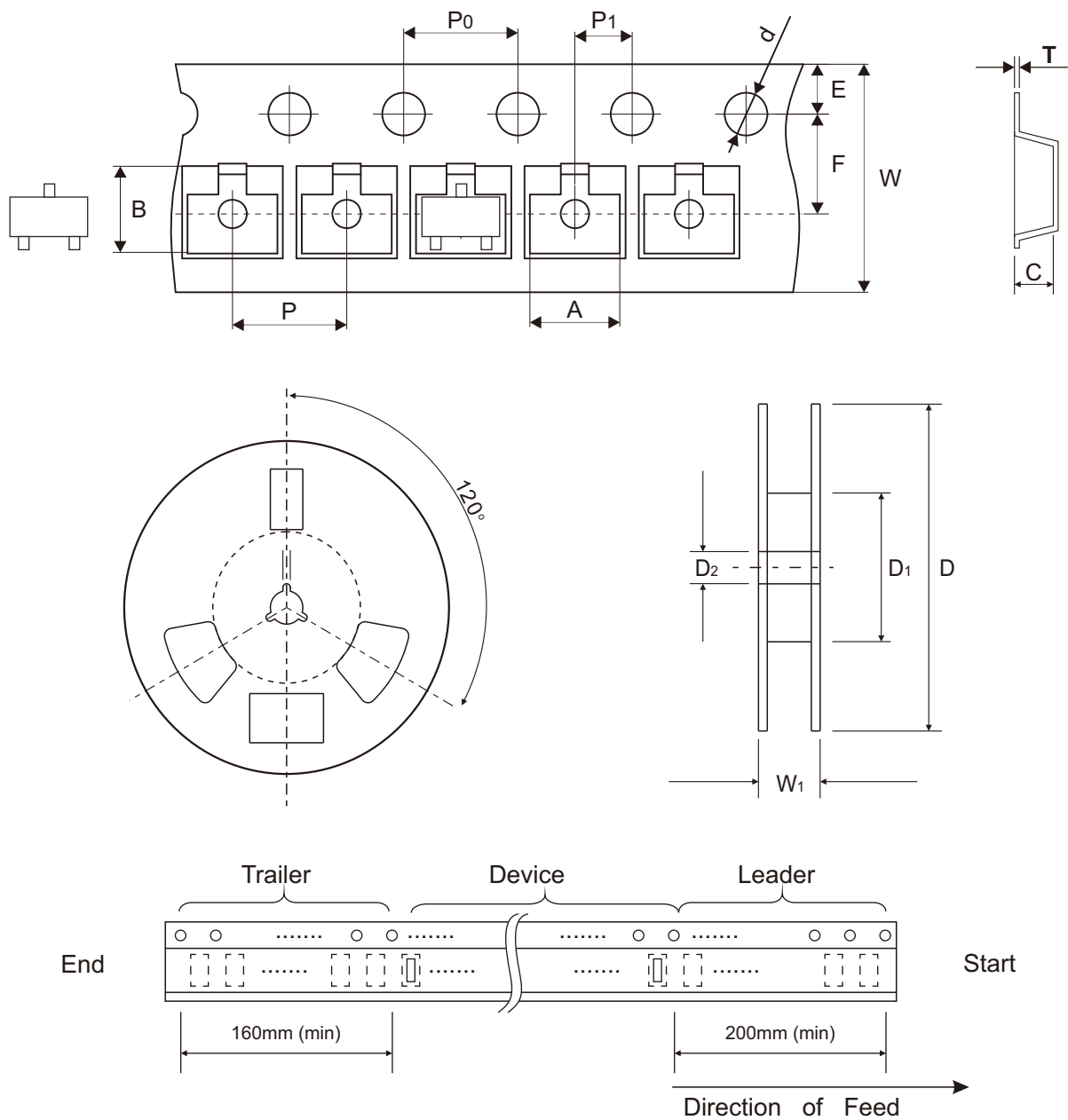


Fig.4 - Reverse Characteristics



Reel Taping Specification

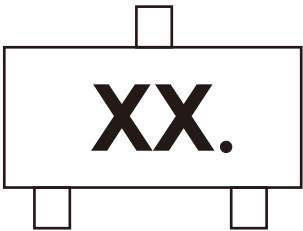


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.19 ± 0.10	1.50 + 0.10 - 0.00	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.059 + 0.004 - 0.000	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-323	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.25 ± 0.02	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.001	0.315 + 0.012 - 0.004	0.484 ± 0.039

Marking Code

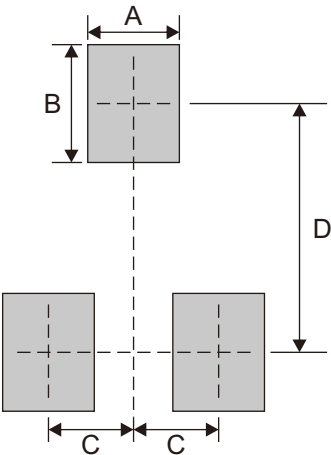
Part Number	Marking Code
ABAS40WT-HF	43.
ABAS40WT-04-HF	44.
ABAS40WT-05-HF	45.
ABAS40WT-06-HF	46.



xx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.70	0.028
B	0.90	0.035
C	0.65	0.026
D	1.90	0.075



Standard Packaging

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