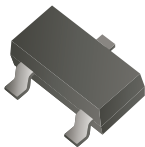


ABAP51-04W-HF

RoHS Device
Halogen Free



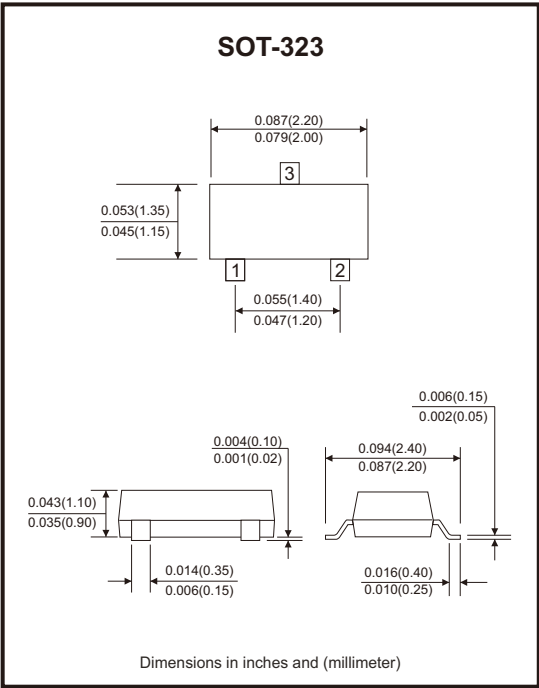
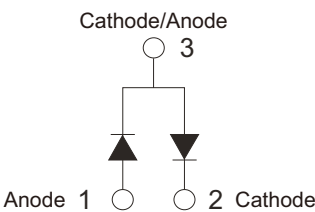
Features

- Low diode capacitance.
- Low diode forward resistance.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOT-323, molded plastic.
- Molding compound: UL flammability classification rating 94V-0.
- Terminals: Matte tin-plated leads, solderability per MIL-STD-202, method 208.

Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Continuous reverse voltage	V_R	60	V
Forward current	I_F	50	mA
Power dissipation ($T_{SP}=90^{\circ}C$)	P_D	240	mW
Operating junction temperature range	T_J	-55 to +150	$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}C$

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Continuous reverse voltage	$I_R = 10\mu A$	V_R	50			V
Reverse voltage leakage current	$V_R = 50V$	I_R			100	nA
Forward voltage	$I_F = 50mA$	V_F			1.1	V
Diode capacitance	$V_R = 0V, f = 1MHz$	C_{D1}		0.4		pF
	$V_R = 1V, f = 1MHz$	C_{D2}		0.3	0.55	
	$V_R = 5V, f = 1MHz$	C_{D3}		0.2	0.35	
Diode forward resistance	$I_F = 0.5mA, f = 100MHz$	R_{D1}		5.5	9	Ω
	$I_F = 1mA, f = 100MHz$	R_{D2}		3.6	6.5	
	$I_F = 10mA, f = 100MHz$	R_{D3}		1.5	2.5	

Rating and Characteristic Curves (ABAP51-04W-HF)

Fig.1 - Diode Capacitance as a Function of Reverse Voltage

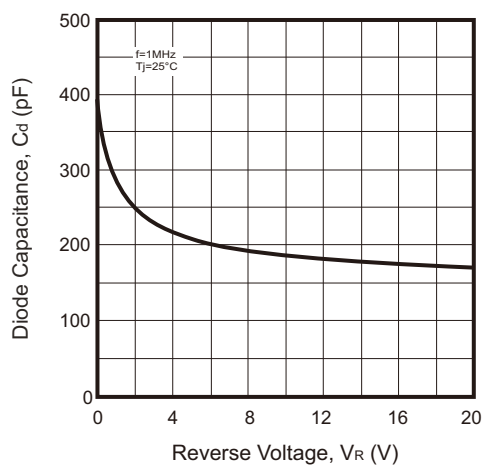
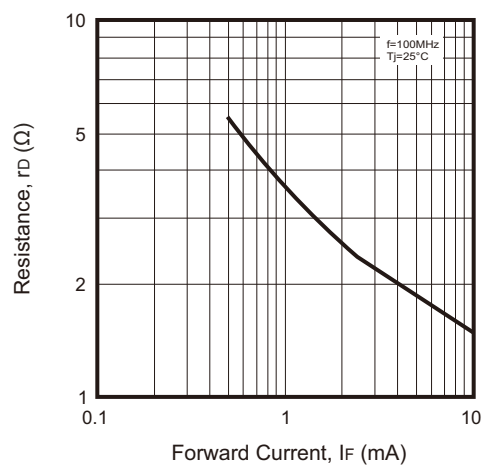
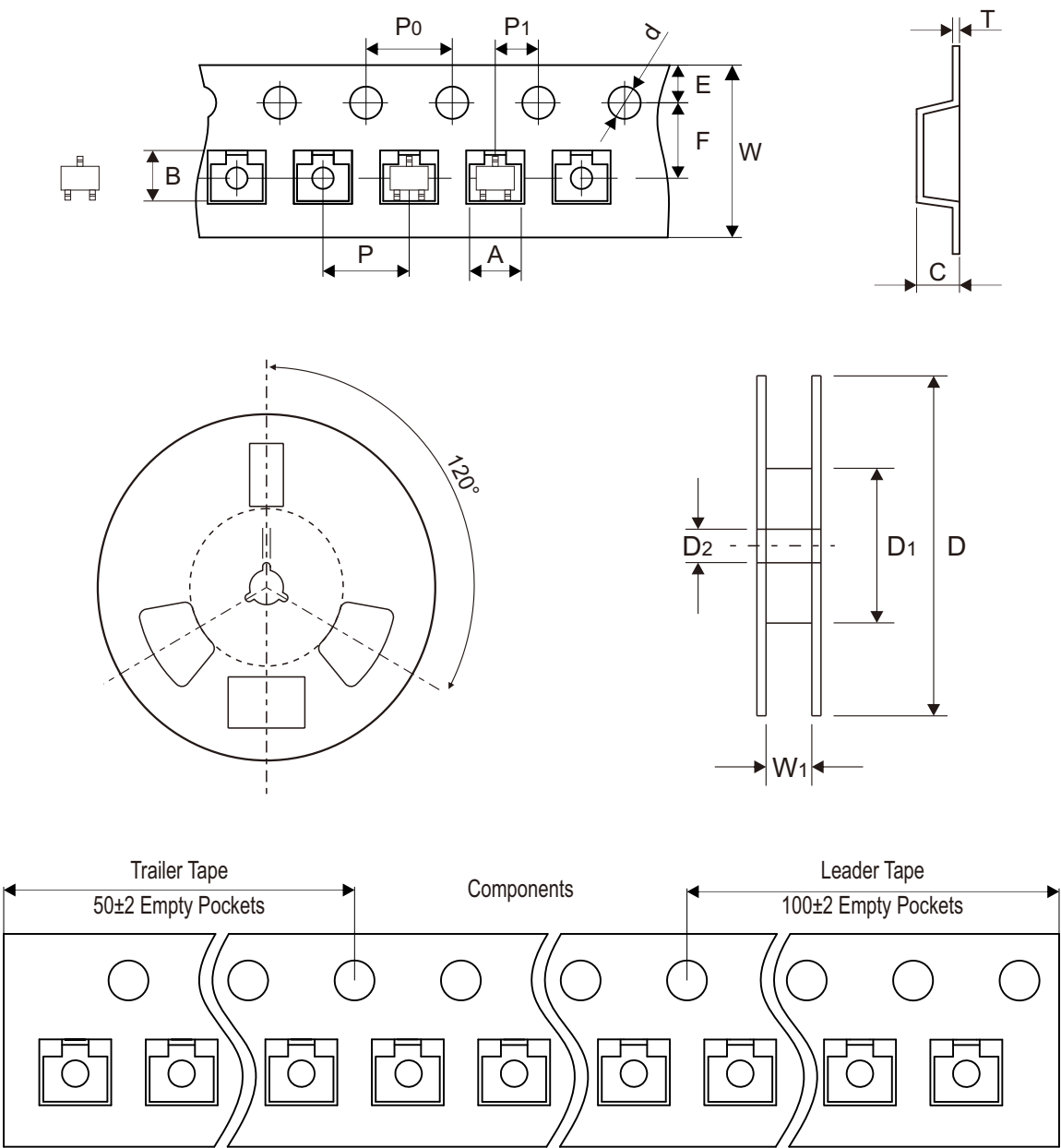


Fig.2 - Forward Voltage as a Function of Forward Current



Reel Taping Specification

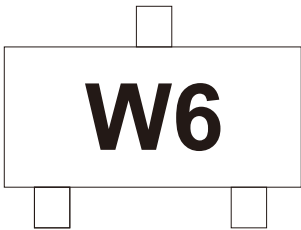


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.19 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

SOT-323	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.22 ± 0.02	8.00 + 0.30 - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.315 + 0.012 - 0.004	0.374 ± 0.039

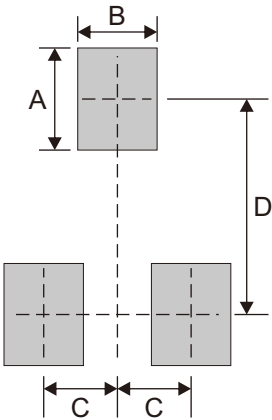
Marking Code

Part Number	Marking Code
ABAP51-04W-HF	W6



Suggested P.C.B. PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.90	0.035
B	0.70	0.028
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