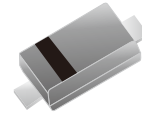


A1SS400-HF

RoHS Device
Halogen Free

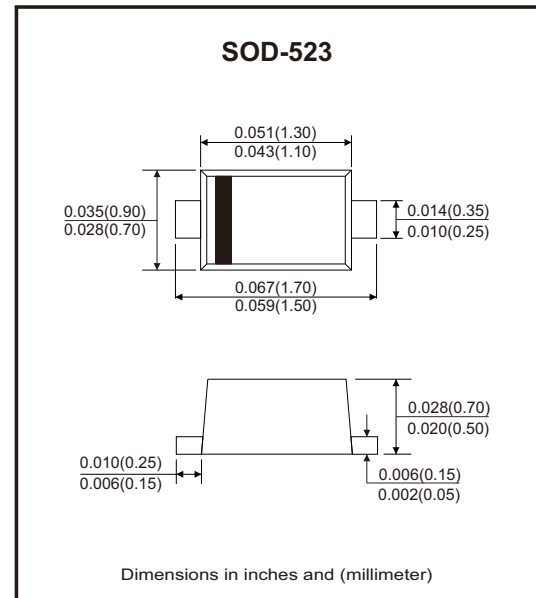


Features

- High speed and high reliability.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOD-523 package, molded plastic.
- Molding compound: UL flammability classification rating 94V-0.
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202 , method 208.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.



Circuit Diagram



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

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	V _{RRM}	90	V
DC blocking voltage	V _R	80	V
Forward continuous current	I _{FM}	225	mA
Average rectified output current	I _O	100	mA
Non-repetitive peak forward surge current @ t=8.3ms	I _{FSM}	2	A
Power dissipation	P _D	150	mW
Thermal resistance junction to case	R _{θJC}	400	°C/W
Operating junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F = 100mA			1.2	V
Maximum peak reverse current	I _R	V _R = 80V			0.1	μA
Total capacitance	C _J	V _R = 0.5V, f = 1.0MHz			3.0	pF
Reverse recovery time	t _{rr}	V _R = 6V, I _F = 10mA, R _L = 100Ω			4.0	nS

Typical Rating and Characteristic Curves (A1SS400-HF)

Fig.1 - Typical Reverse Characteristics

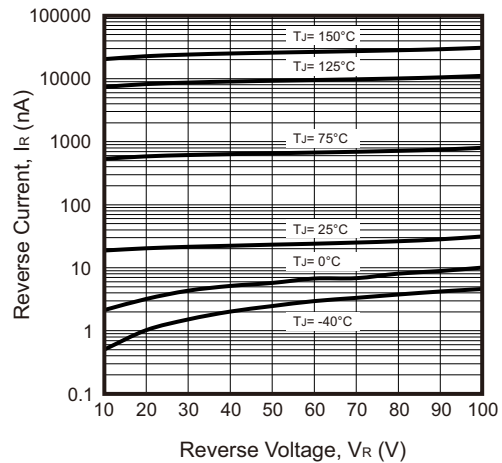


Fig.2 - Typical Forward Characteristics

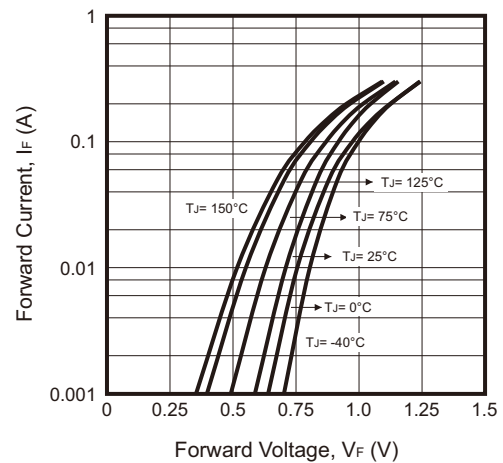


Fig.3 - Capacitance vs. Reverse Voltage

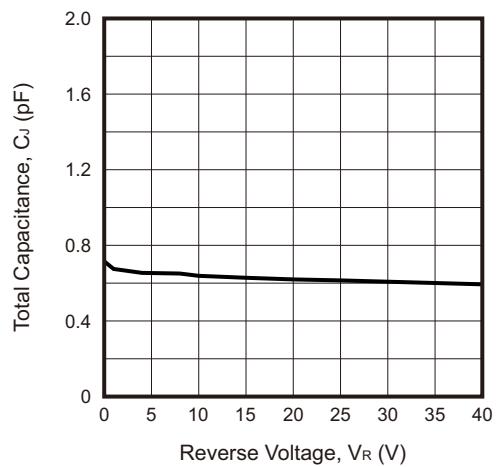
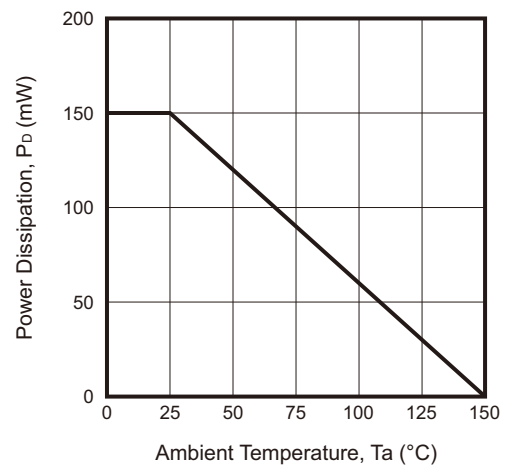
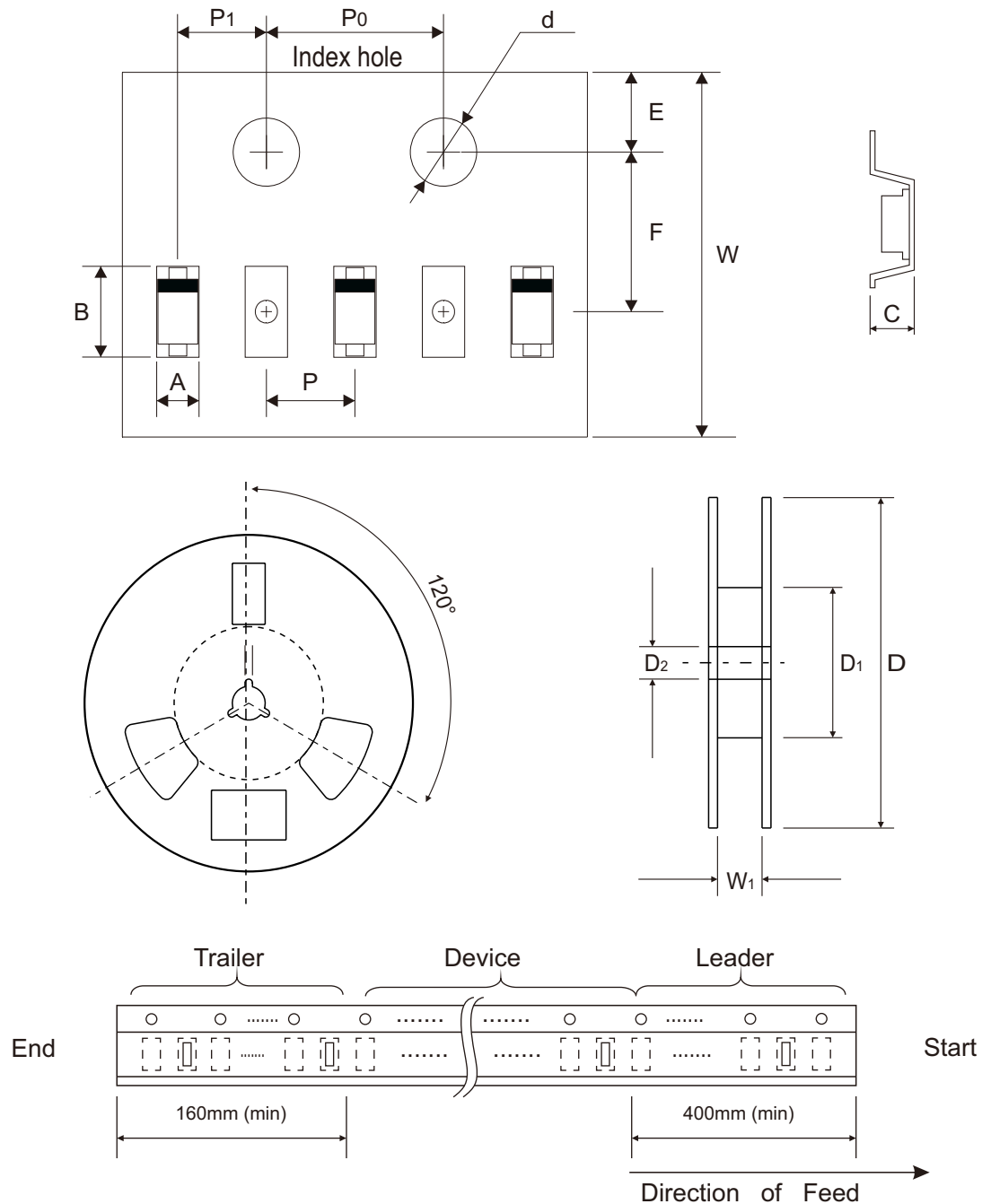


Fig.4 - Power Derating Curve



Reel Taping Specification

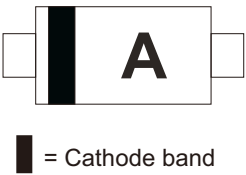


	SYMBOL	A	B	C	d	D	D1	D2
SOD-523	(mm)	0.96 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.038 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

	SYMBOL	E	F	P	P0	P1	T	W	W1
SOD-523	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	$8.00 + 0.30 - 0.10$	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	$0.315 + 0.012 - 0.004$	0.374 ± 0.039

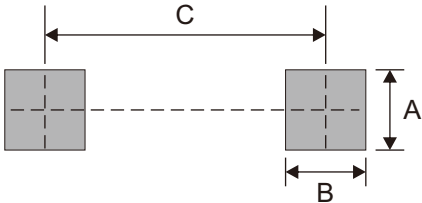
Marking Code

Part Number	Marking Code
A1SS400-HF	A



Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	0.40	0.016
B	0.40	0.016
C	1.40	0.055



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-523	3,000	7