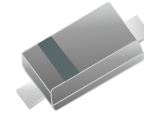


1SS389-G

Reverse Voltage: 10 V
Forward Current: 100 mA
RoHS Device



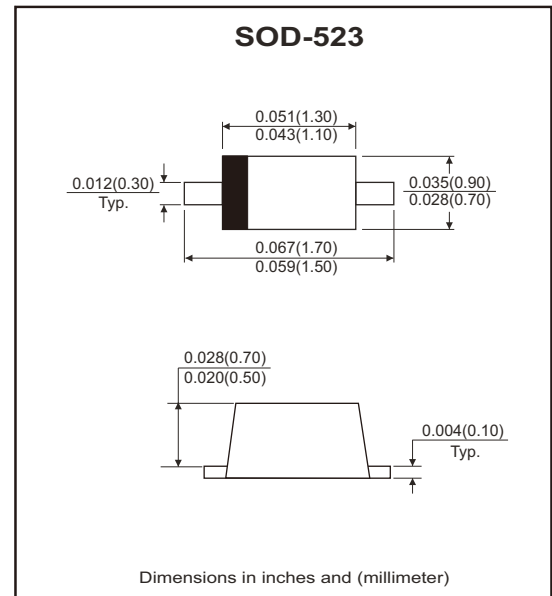
Features

- High speed switching.
- Small surface mounting type.
- Low forward voltage.

Mechanical data

- Case: SOD-523 standard package, Molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026
- Mounting position: Any
- Weight: 0.012 grams(approx.)

Circuit Diagram



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

Parameter	Conditions	Symbol	Value	Unit
Peak reverse voltage		V _{RM}	15	V
DC reverse voltage		V _R	10	V
Maximum (peak) forward current		I _{FM}	200	mA
Continuous forward current		I _F	100	mA
Non-repetitive peak forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}	1	A
Total power dissipation		P _{tot}	150	mW
Operating temperature range		T _{op}	-40 to +100	°C
Junction temperature range		T _J	-40 to +125	°C
Storage temperature range		T _{STG}	-55 to +125	°C

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	I _R = 50µA	V _{(BR)R}	10			V
Forward voltage	I _F = 1mA	V _F		0.18		V
	I _F = 5mA			0.23	0.30	
	I _F = 100mA			0.35	0.50	
Reverse current	V _R = 10V	I _R			20	µA
Diode capacitance	V _R = 0V, f=1MHz	C _d		20	40	pF

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

REV:A

RATING AND TYPICAL CHARACTERISTIC CURVES (1SS389-G)

Fig.1 - Power Derating Curve

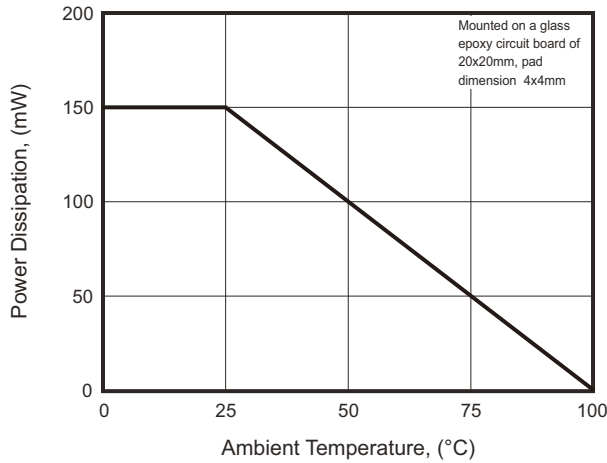


Fig.2 - Forward Characteristics

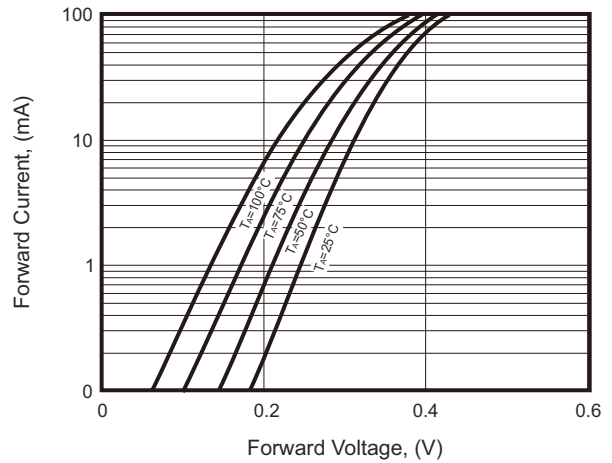


Fig.3 - Reverse Characteristics

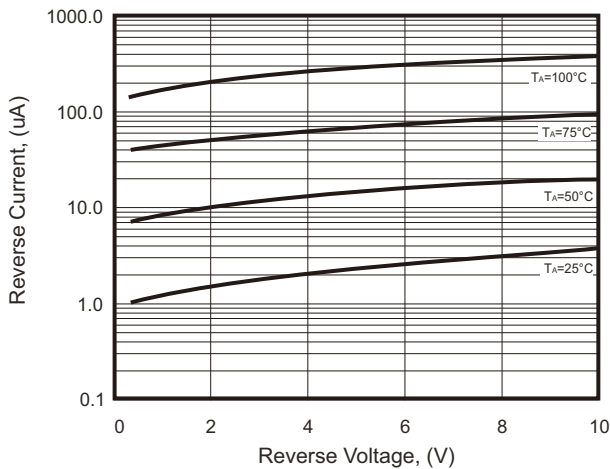
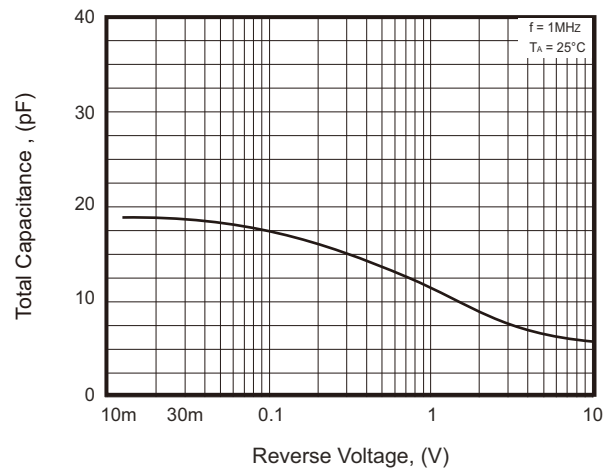
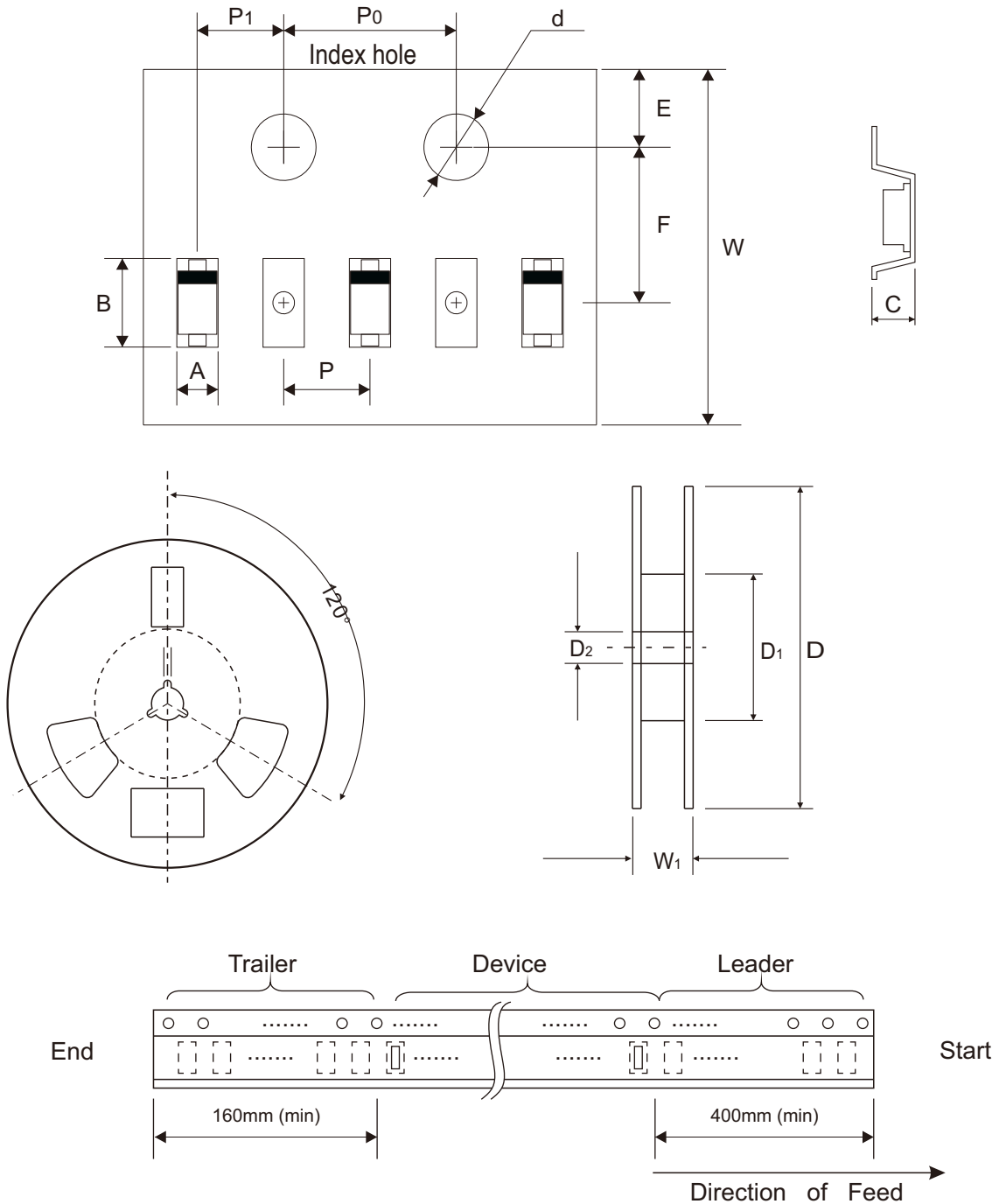


Fig.4 - Capacitance between terminals



Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.95 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	Φ1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.037 ± 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

SOD-523	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	8.00 ± 0.30 / - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.158 ± 0.004	0.079 ± 0.002	0.315 ± 0.012 / - 0.004	0.484 ± 0.039

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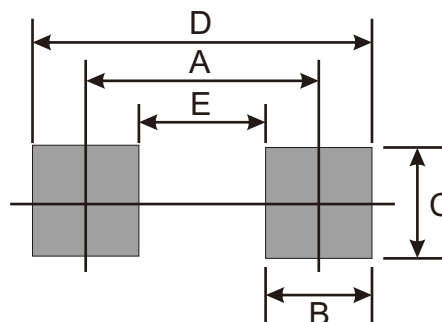
Marking Code

Part Number	Marking Code
1SS389-G	S4



Suggested PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.40	0.055
B	0.40	0.016
C	0.40	0.016
D	1.80	0.071
E	1.00	0.039



Standard Packaging

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