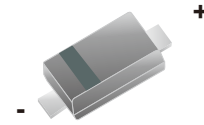


RB521S-40-HF

RoHS Device
Halogen Free

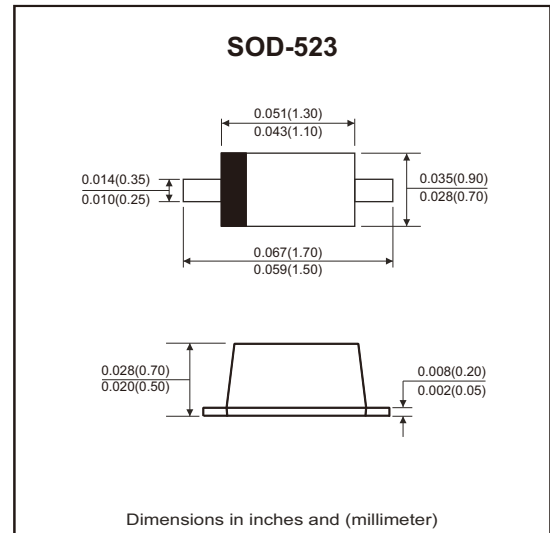


Features

- Ultra small mold type.
- High reliability.

Mechanical data

- Case: SOD-523, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.
- Polarity: Cathode line denotes the cathode end.



Circuit Diagram



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

Parameter	Symbol	Value	Unit
Reverse voltage @ $I_R = 10\mu A$	V_R	40	V
Forward continuous current @ $T_a = 25^\circ C$	I_{FM}	200	mA
Non-repetitive peak forward surge current @ $t=8.3ms$, half sine-wave	I_{FSM}	1	A
Power dissipation	P_D	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	667	$^\circ C/W$
Junction temperature	T_J	125	$^\circ C$
Storage temperature range	T_{STG}	-40 to +150	$^\circ C$

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Maximum forward voltage	V_F	$I_F = 200mA$			0.59	V
Maximum reverse current	I_R	$V_R = 30V$			5	μA
Maximum breakdown voltage	V_R	$I_R = 100\mu A$	40			V

Typical Rating and Characteristic Curves (RB521S-40-HF)

Fig.1 - Forward Characteristics

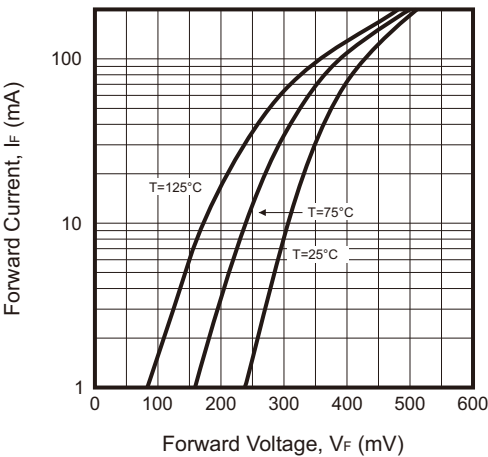


Fig.2 - Reverse Characteristics

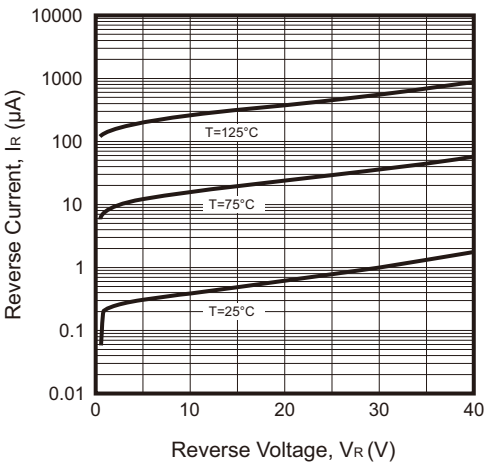
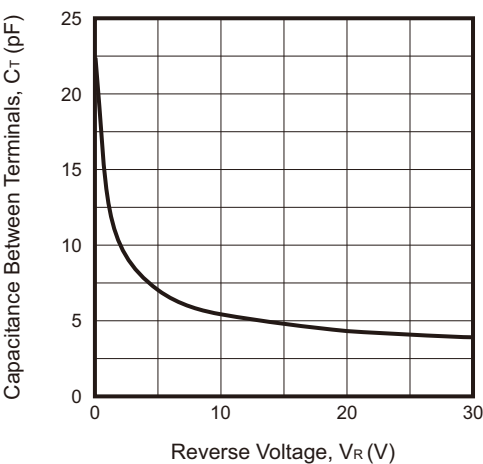
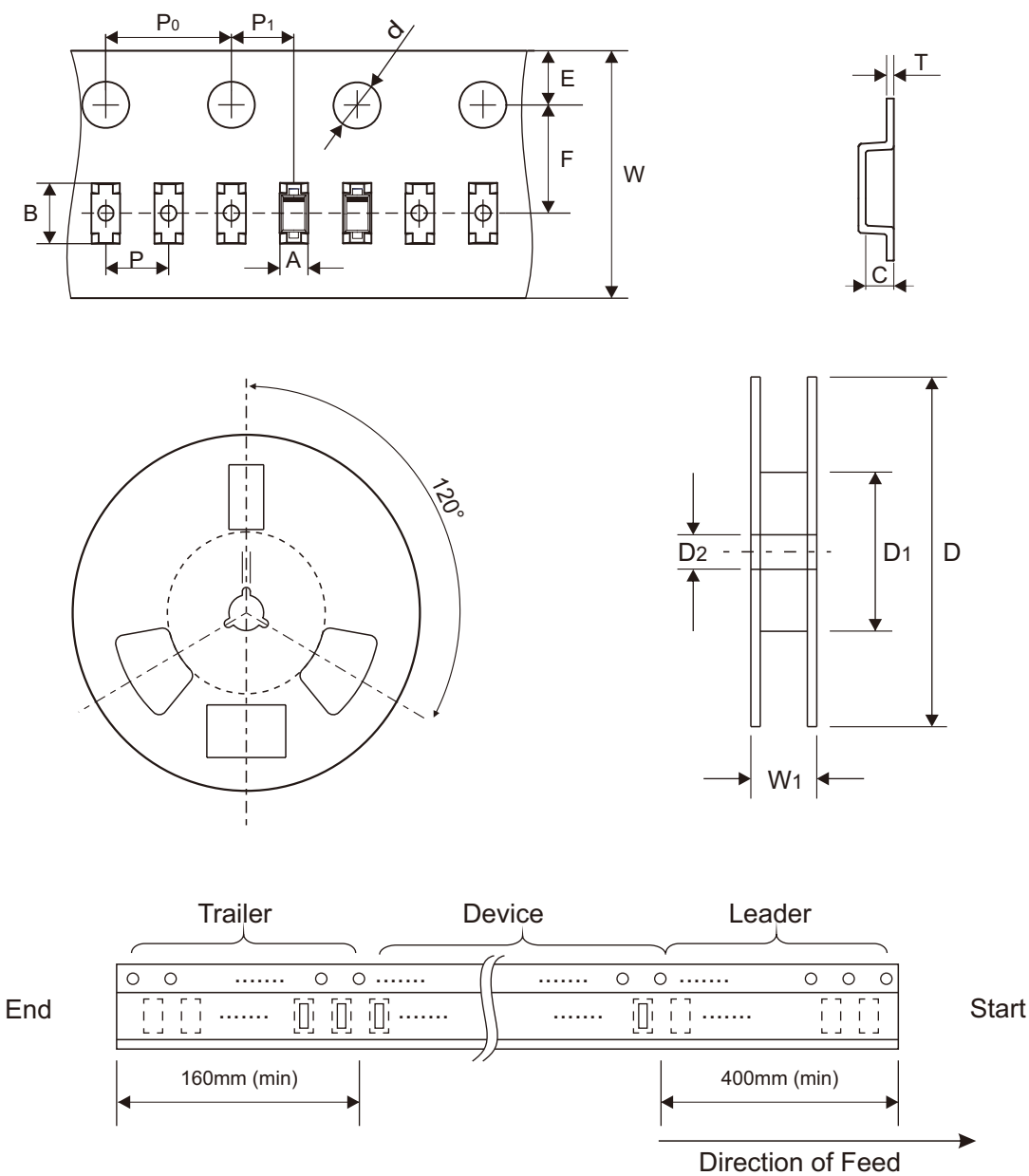


Fig.3 - Capacitance Characteristics



Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.91 ± 0.05	1.79 ± 0.05	0.68 ± 0.05	1.55 ± 0.05	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.036 ± 0.002	0.070 ± 0.002	0.027 ± 0.002	0.061 ± 0.002	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-523	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	$8.00 + 0.30 - 0.10$	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	$0.315 + 0.012 - 0.004$	0.484 ± 0.039

Marking Code

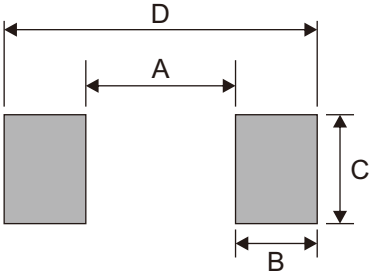
Part Number	Marking Code
RB521S-40-HF	S.



 = Cathode band

Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.10	0.043
B	0.60	0.024
C	0.80	0.031
D	2.30	0.091



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-523	8,000	7