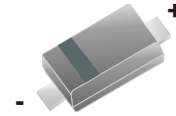


RB520S-40-P2-HF

RoHS Device

Halogen Free



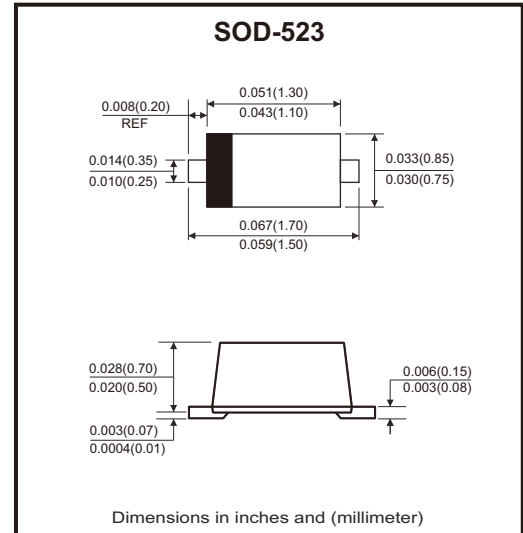
Features

- Low current rectification.
- Low reverse current.

Mechanical data

- Case: SOD-523, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	40	V
DC blocking voltage	V_R	40	V
Continuous forward current	I_O	200	mA
Non-repetitive peak forward current @ 8.3ms single half sine-wave	I_{FSM}	1	A
Power dissipation	P_D	200	mW
Junction temperature	T_J	125	°C
Storage temperature range	T_{STG}	-55 to +125	°C

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 10\text{mA}$			0.39	V
		$I_F = 100\text{mA}$			0.55	
Reverse breakdown voltage	V_{BR}	$I_R = 100\mu\text{A}$	40			V
Reverse current	I_R	$V_R = 10\text{V}$			1	μA
		$V_R = 40\text{V}$			10	μA

Typical Rating and Characteristic Curves (RB520S-40-P2-HF)

Fig.1 - Forward Characteristics

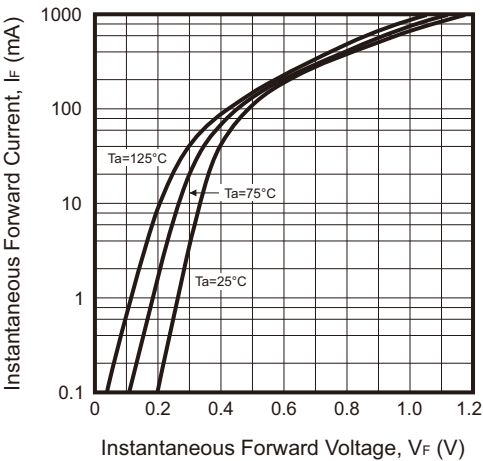


Fig.2 - Reverse Characteristics

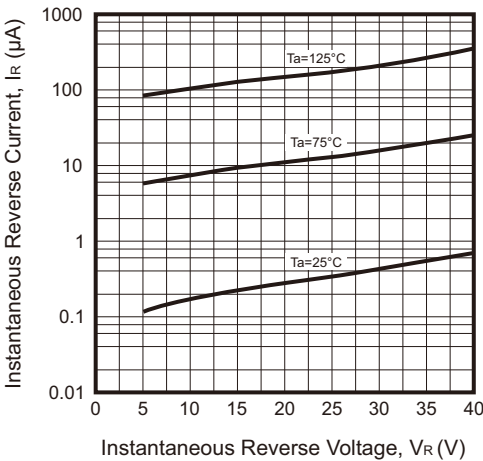
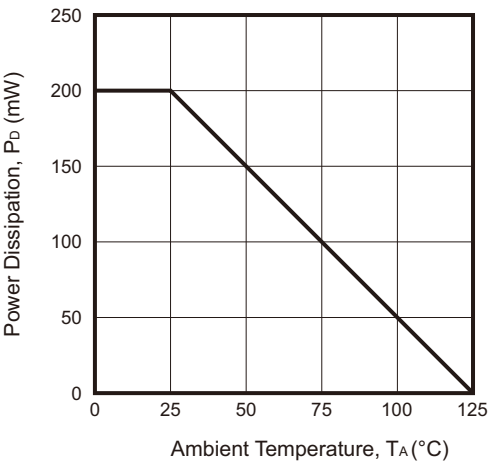
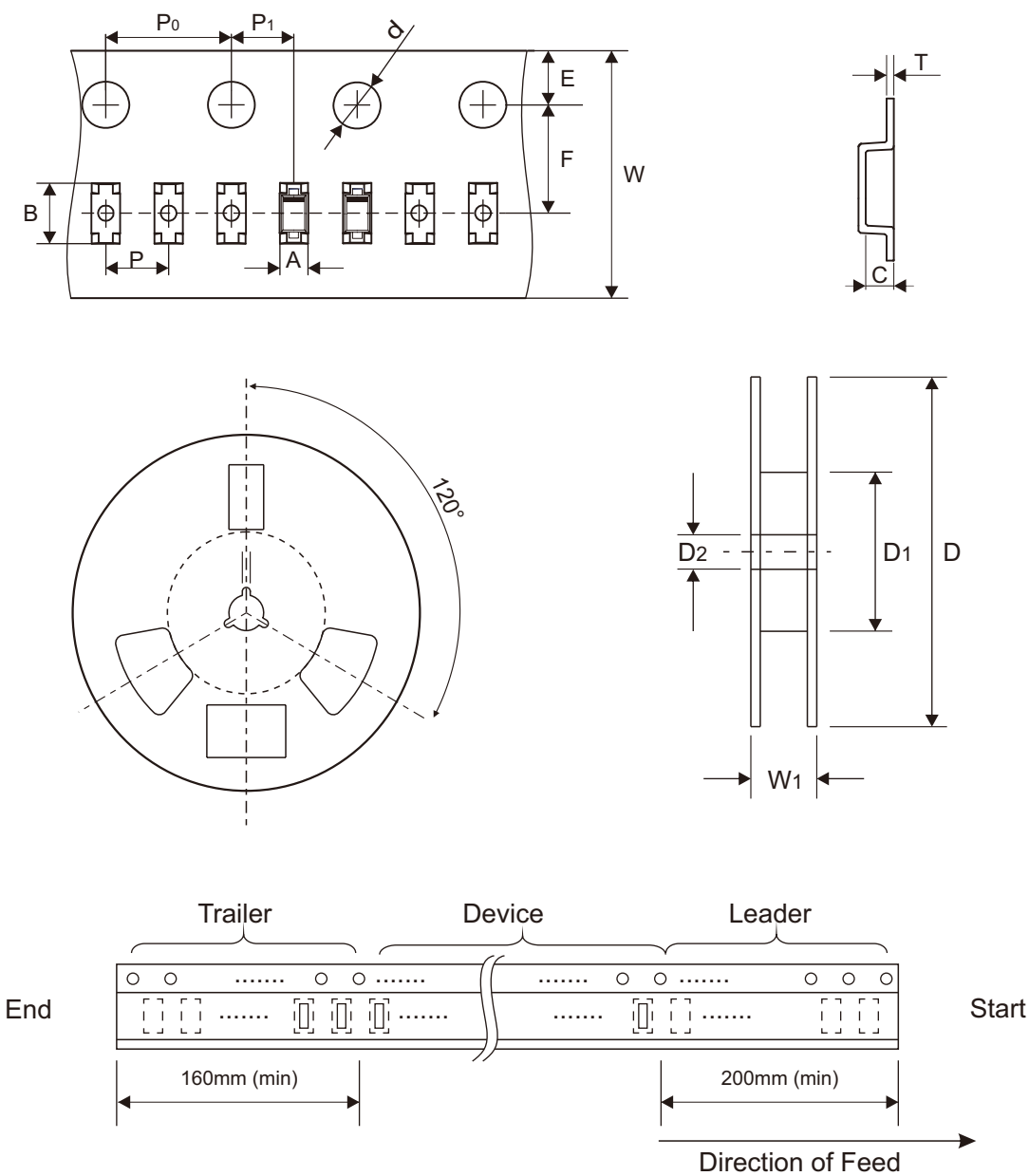


Fig.3 - Power Derating Curve



Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.03	1.88 ± 0.05	0.73 ± 0.05	1.50 + 0.10 - 0.00	178.00 ± 2.00	50.00 ± 0.50	13.00 ± 0.25
	(inch)	0.035 ± 0.001	0.074 ± 0.002	0.029 ± 0.002	0.059 + 0.004 - 0.000	7.008 ± 0.079	1.969 ± 0.020	0.512 ± 0.010

SOD-523	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.03	8.00 + 0.30 - 0.10	9.50 ± 0.50
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 + 0.012 - 0.004	0.374 ± 0.020

Marking Code

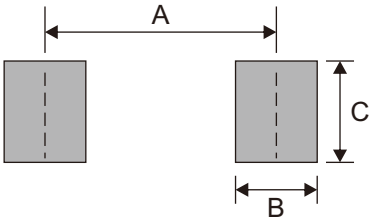
Part Number	Marking Code	
RB520S-40-P2-HF	D	D1



 = Cathode band
x/xx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.42	0.056
B	0.60	0.024
C	0.70	0.028



Standard Packaging

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