

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Comchip Technology](#)

[CDBQR0140L-HF](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

SMD Schottky Barrier Diode



CDBQR0140L-HF

Io = 100 mA

VR = 40 Volts

RoHS Device

Halogen Free

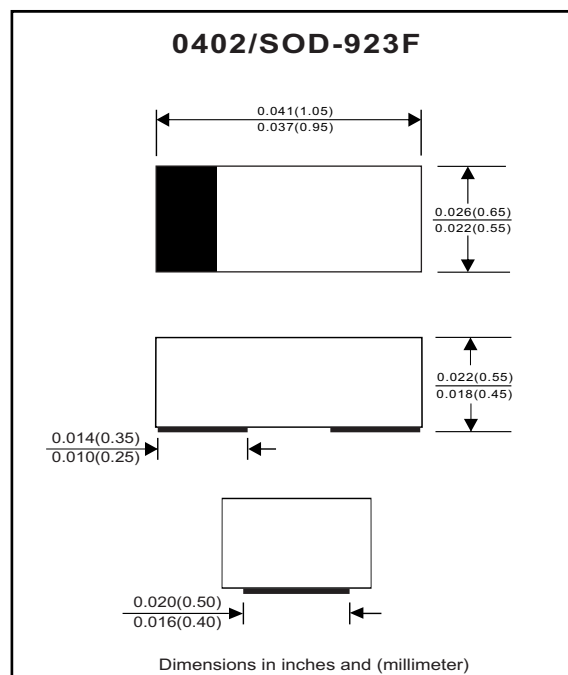


Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin package.
- Majority carrier conduction.

Mechanical data

- Case: 0402/SOD-923F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Cathode band & B8
- Mounting position: Any
- Weight: 0.001 gram(approx.).



Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive Peak reverse voltage		VRRM			45	V
Reverse voltage		VR			40	V
Average forward rectified current		Io			100	mA
Forward current, surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	IFSM			1	A
Power Dissipation		Pd			125	mW
Thermal resistance	Junction to ambient	RθJA			260	°C/W
Junction temperature		Tj			+125	°C
Storage temperature		TSTG	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF = 100mA IF = 10mA	VF			0.55 0.34	V
Reverse current	VR = 10V	IR			30	uA
Capacitance between terminals	f = 1 MHz, and 10 VDC reverse voltage	CT		6		pF

SMD Schottky Barrier Diode



RATING AND CHARACTERISTIC CURVES (CDBQR0140L-HF)

Fig. 1 - Forward characteristics

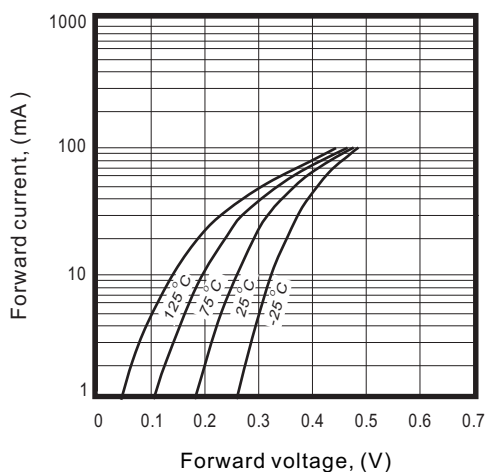


Fig. 2 - Reverse characteristics

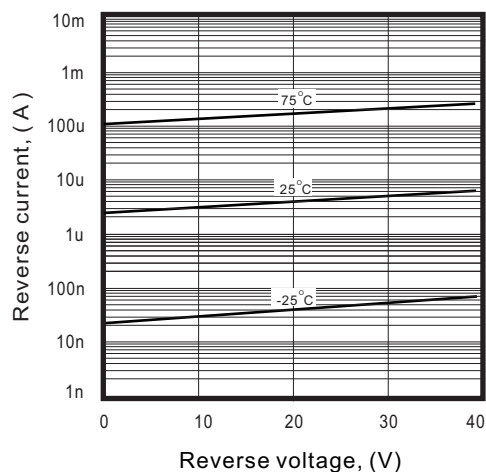


Fig. 3 - Capacitance between terminals characteristics

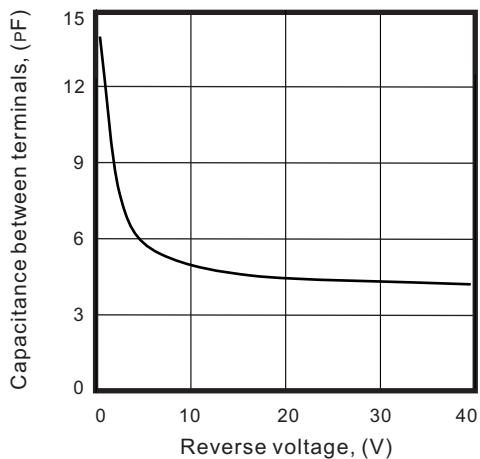
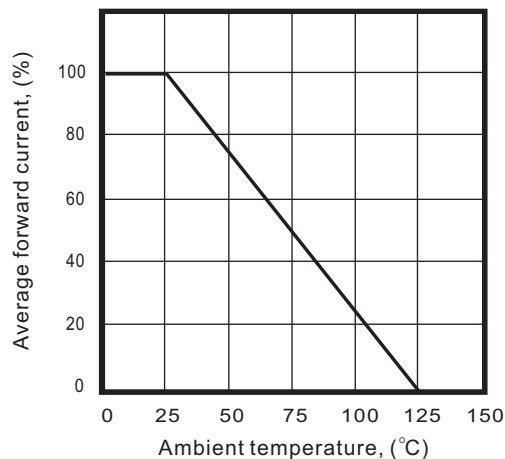
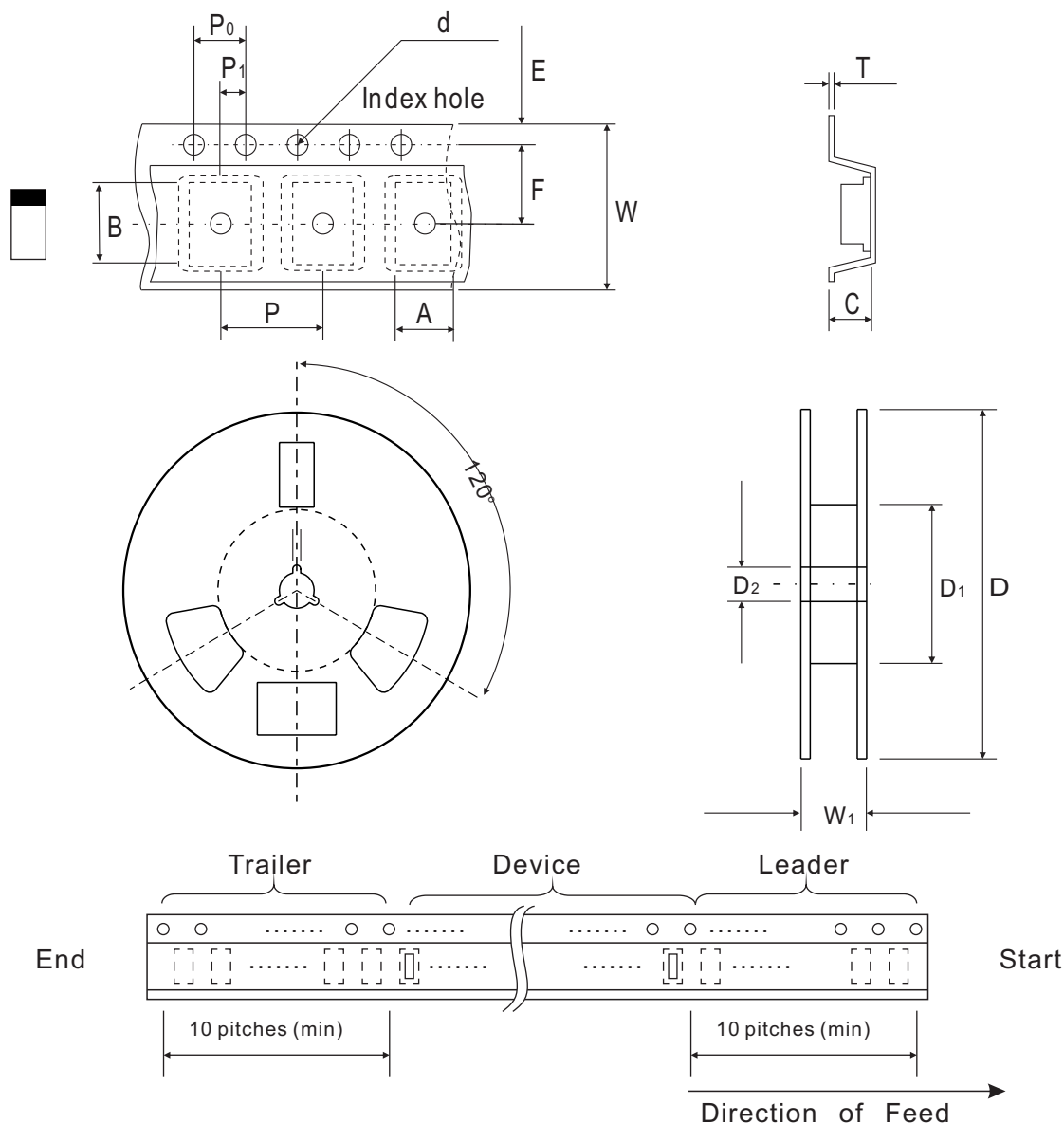


Fig.4 - Current derating curve



SMD Schottky Barrier Diode

Reel Taping Specification



0402 (SOD-923F)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.75 ± 0.10	1.15 ± 0.10	0.60 ± 0.10	1.55 ± 0.10	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.026 ± 0.004	0.045 ± 0.004	0.024 ± 0.004	0.061 ± 0.004	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

0402 (SOD-923F)	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.22 ± 0.05	8.00 ± 0.20	13.5 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

SMD Schottky Barrier Diode

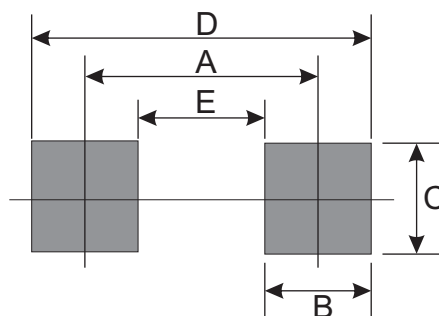
Marking Code

Part Number	Marking Code
CDBQR0140L-HF	B8



Suggested PAD Layout

SIZE	0402/SOD-923F	
	(mm)	(inch)
A	0.750	0.030
B	0.500	0.020
C	0.700	0.028
D	1.250	0.049
E	0.250	0.010



Standard Packaging

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0402/SOD-923F	5,000	7