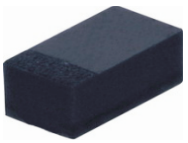
SMD Schottky Barrier Diode

COMCHIP
SMD Diodes Specialist

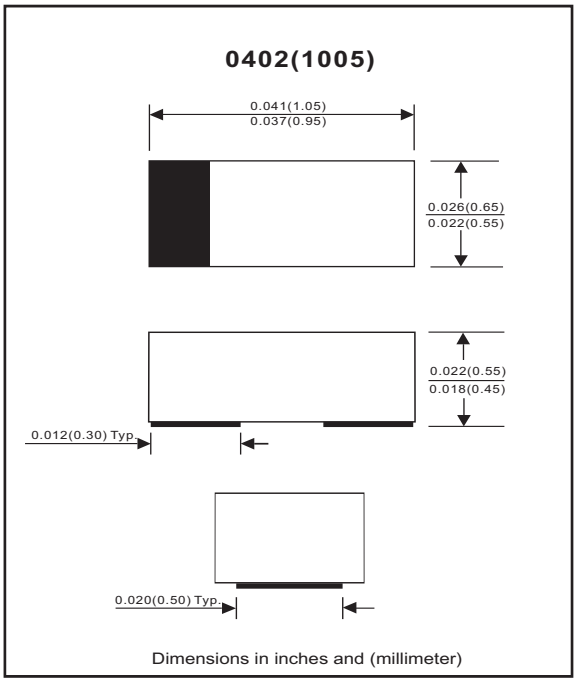
CDBQR0140L-HF (RoHS Device)

Io = 100 mA
V_R = 40 Volts



Features

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



Mechanical data

Case: 0402(1005) standard package, molded plastic.

Terminals: Gold plated, solderable per MIL-STD-750,method 2026.

Marking Code: Cathode band & B8

Mounting position: Any.

Weight: 0.001 gram(approx.).

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive Peak reverse voltage		V_{RRM}			45	V
Reverse voltage		V_R			40	V
Average forward rectified current		I_O			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			1	A
Power Dissipation		P_D			125	mW
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T_j			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 100mA I_F = 10mA	V_F			0.55 0.34	V
Reverse current	V_R = 10V	I_R			30	uA
Capacitance between terminals	f = 1 MHz, and 10 VDC reverse voltage	C_T		6		pF

RATING AND CHARACTERISTIC CURVES (CDBQR0140L-HF)

Fig. 1 - Forward characteristics

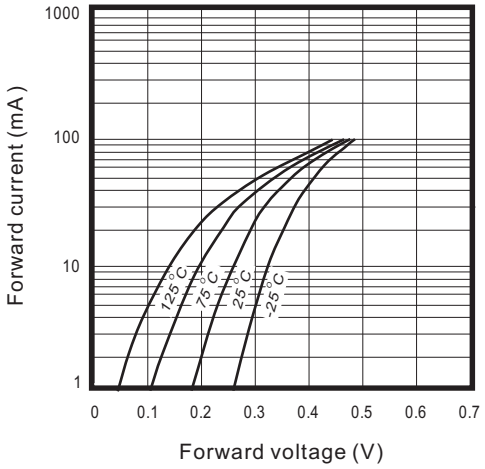


Fig. 2 - Reverse characteristics

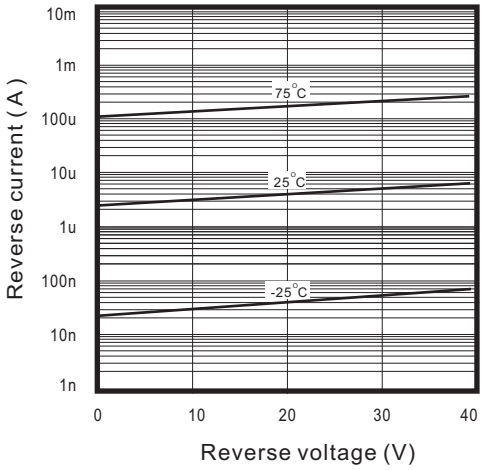


Fig. 3 - Capacitance between terminals characteristics

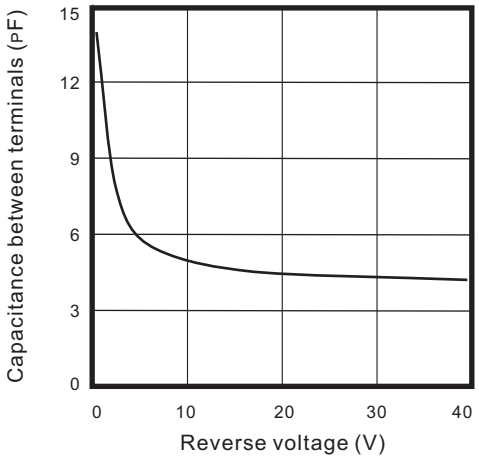
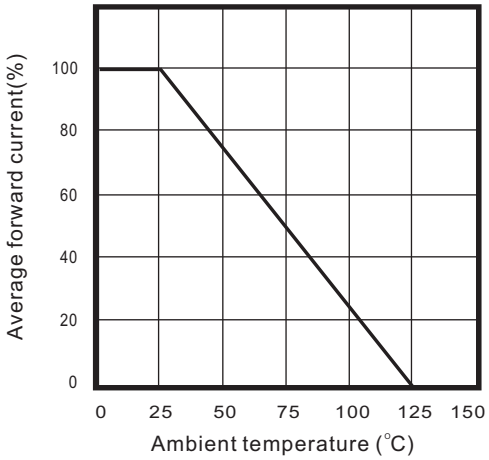
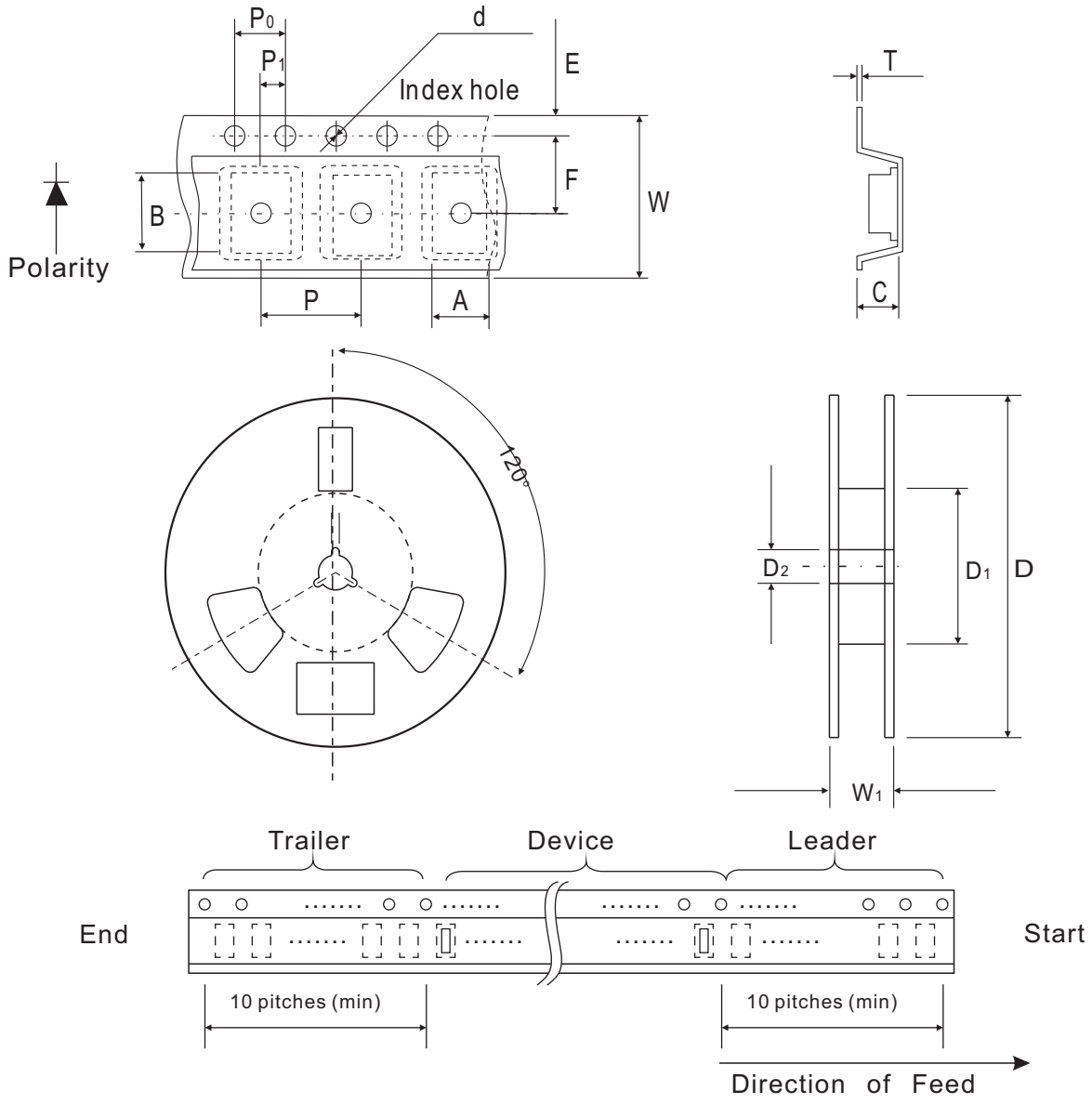


Fig.4 - Current derating curve



Reel Taping Specification



	SYMBOL	A	B	C	d	D	D_1	D_2
QR/0402	(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

	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
QR/0402	(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.

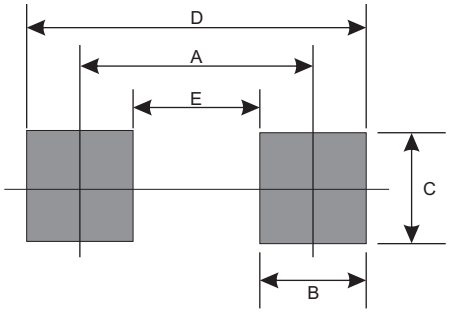
Marking Code

Part Number	Marking Code
CDBQR0140L-HF	B8



Suggested PAD Layout

SIZE	QR/0402	
	(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 Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
QR/0402	5000	7