

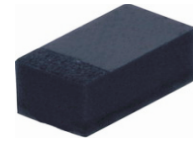
SMD Schottky Barrier Diode



SMD Diodes Specialist

CDBQR00340 (RoHS Device)

$I_o = 30 \text{ mA}$
 $V_R = 40 \text{ Volts}$

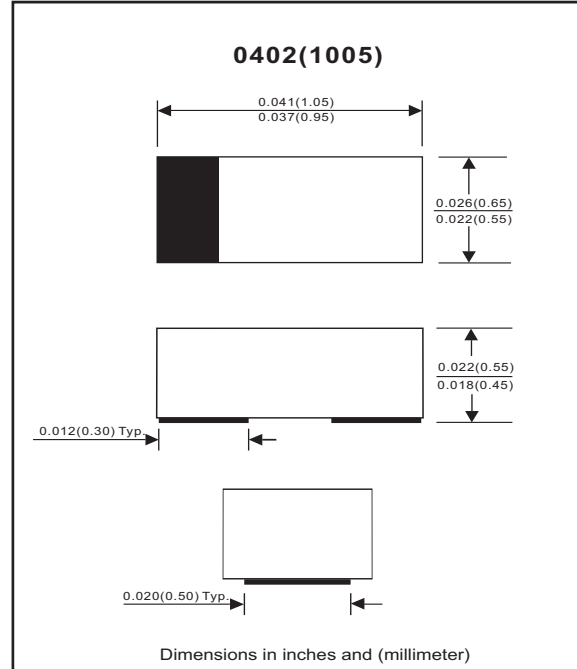


Features

- Designed for mounting on small surface.
- Extremely thin package.
- Low stored charge.
- Majority carrier conduction.

Mechanical data

- Case: 0402(1005) standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.001 gram(approx.).



Maximum Rating (at TA=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 current		I_o			30	mA
Forward current, surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}		500		mA
Power Dissipation		P_D			200	mW
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T_j			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1 \text{ mA DC}$	V_F			0.37	V
Reverse current	$V_R = 30V$ $V_R = 40V$	I_R			0.50 1.00	uA
Capacitance between terminals	$F = 1 \text{ MHz}$ and 1 VDC reverse voltage	C_T		1.5		pF

RATING AND CHARACTERISTIC CURVES (CDBQR00340)

Fig. 1 - Forward characteristics

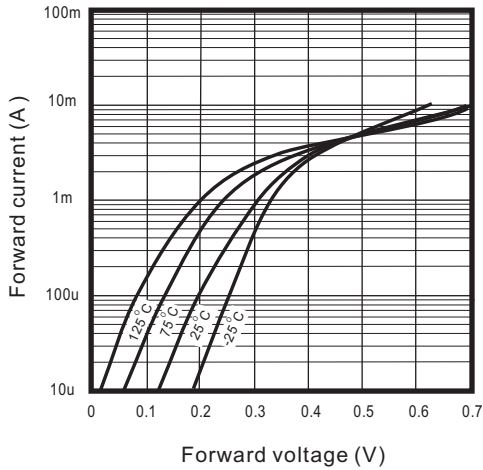


Fig. 2 - Reverse characteristics

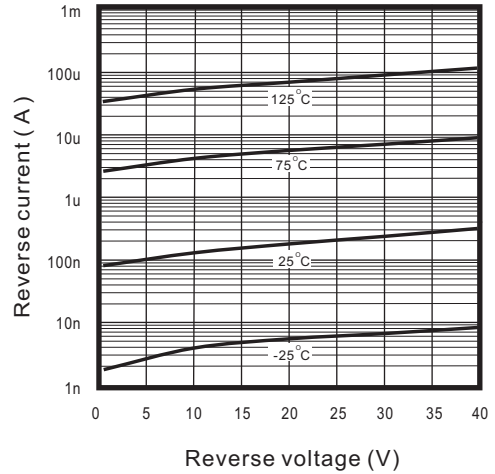


Fig.3 - Capacitance between terminals characteristics

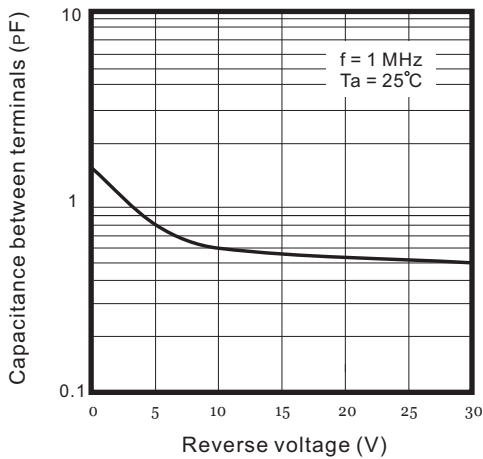
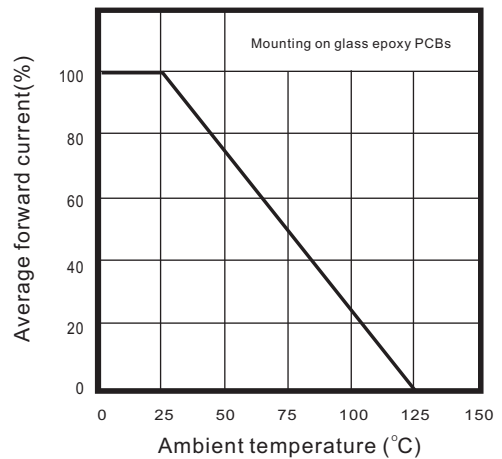
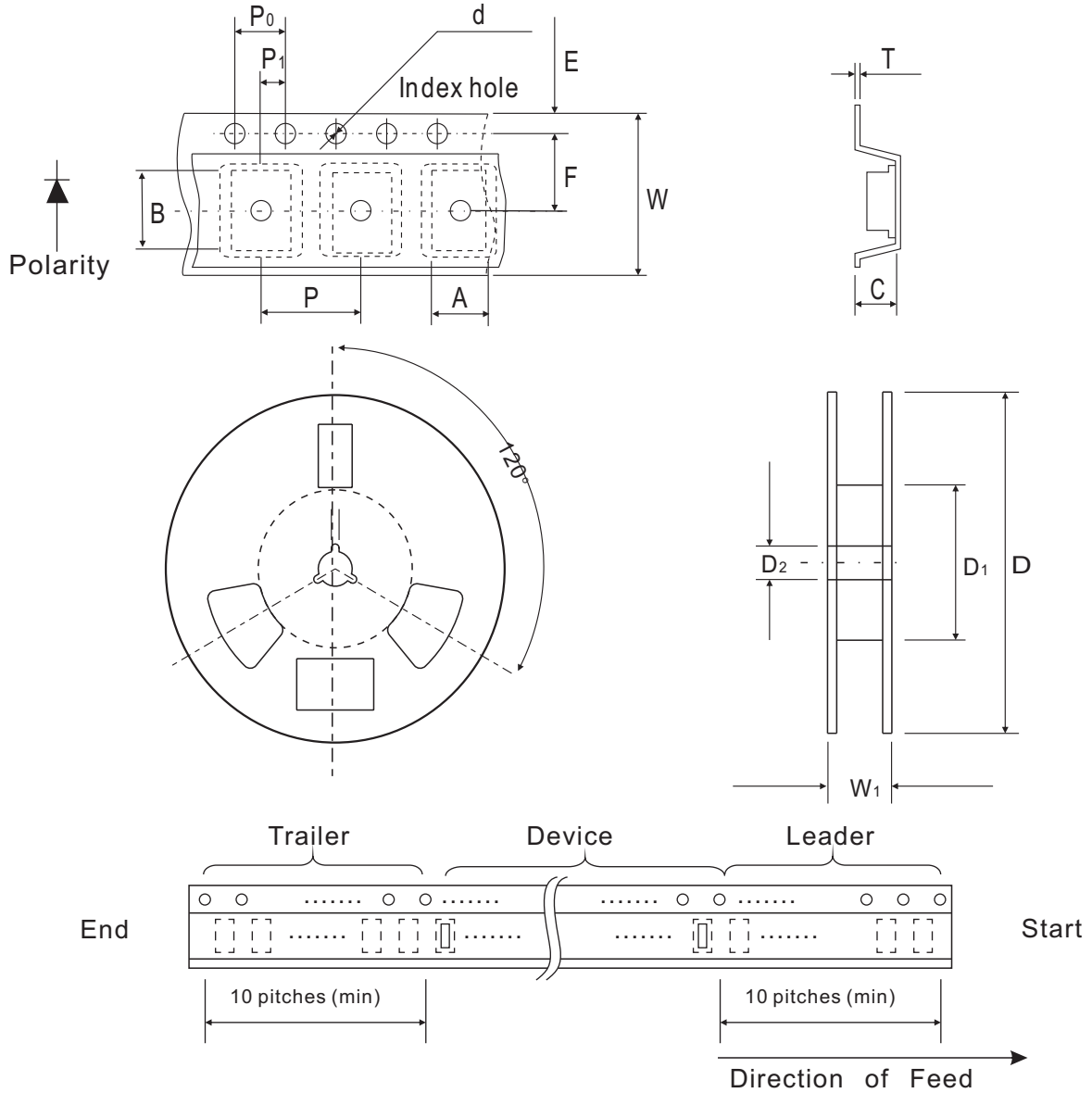


Fig.4 - Current derating curve



Reel Taping Specification



QR/0402	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)	0.030 ± 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

QR/0402	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.

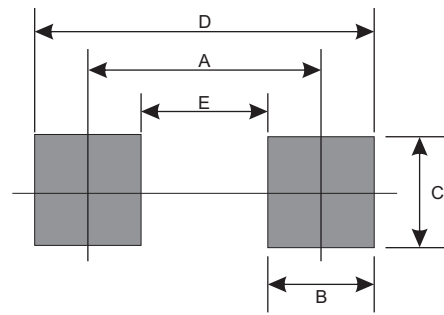
Marking Code

Part Number	Marking Code
CDBQR00340	B2



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