

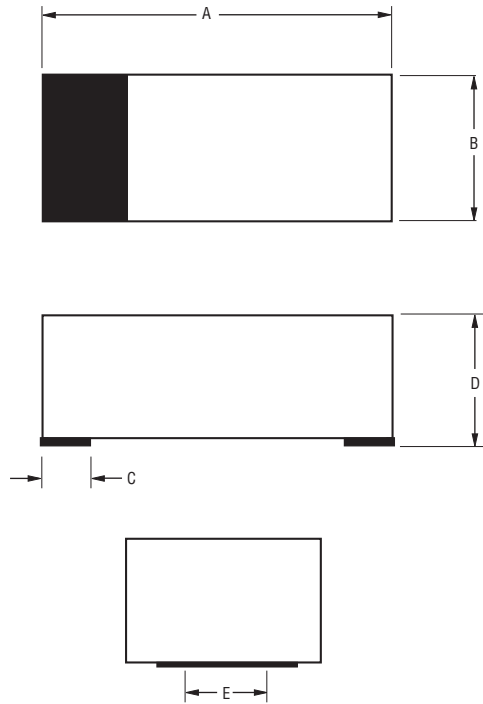
Applications

- Cellular phones
- PDAs
- Desktop PCs and notebooks
- Digital cameras
- MP3 players

Switching Chip Diode Series - 0603/1005

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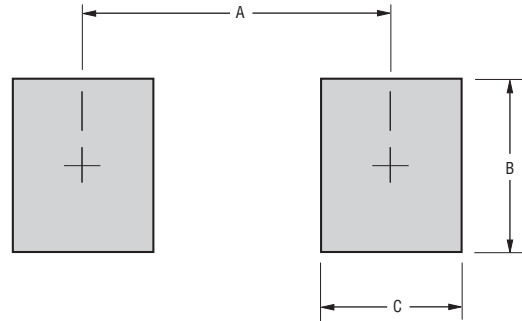
Product Dimensions



Dimension	0603	1005
A	$\frac{1.60 - 1.80}{(0.063 - 0.071)}$	$\frac{2.40 - 2.60}{(0.095 - 0.102)}$
B	$\frac{0.80 - 1.00}{(0.031 - 0.039)}$	$\frac{1.10 - 1.30}{(0.043 - 0.051)}$
C	$\frac{0.45}{(0.018)}$ Typ.	$\frac{0.50}{(0.020)}$ Typ.
D	$\frac{0.70 - 0.85}{(0.027 - 0.033)}$	$\frac{0.70 - 0.90}{(0.027 - 0.035)}$
E	$\frac{0.70}{(0.028)}$ Typ.	$\frac{1.00}{(0.039)}$ Typ.

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Recommended Pad Layout



Dimension	0603	1005
A (Max.)	$\frac{1.25}{(0.049)}$	$\frac{2.00}{(0.079)}$
B (Min.)	$\frac{1.00}{(0.039)}$	$\frac{1.3}{(0.051)}$
C (Min.)	$\frac{0.6}{(0.024)}$	$\frac{0.7}{(0.028)}$

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Physical Specifications

Case 0603(1608) / 1005(2512) Molded plastic
 Terminals Solder plated, solderable per MIL-STD-750,
 Method 2026
 Polarity..... Indicated by cathode band
 Mounting Position..... Any

Typical Part Marking

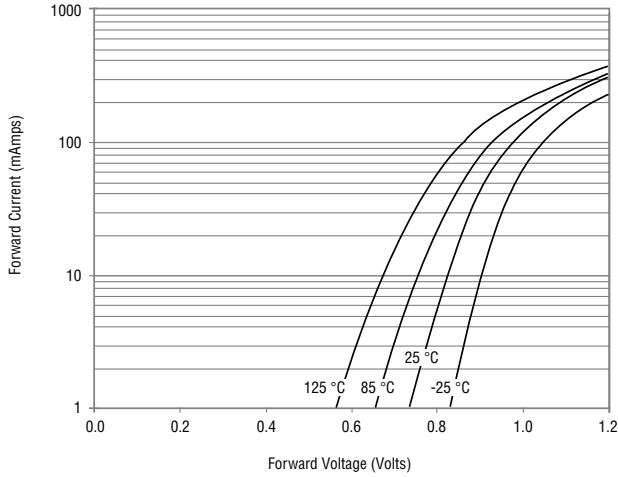
CDxxx-S0180..... S1
 CD1005-S01575..... S3
 CDxxx-S0180R..... S2

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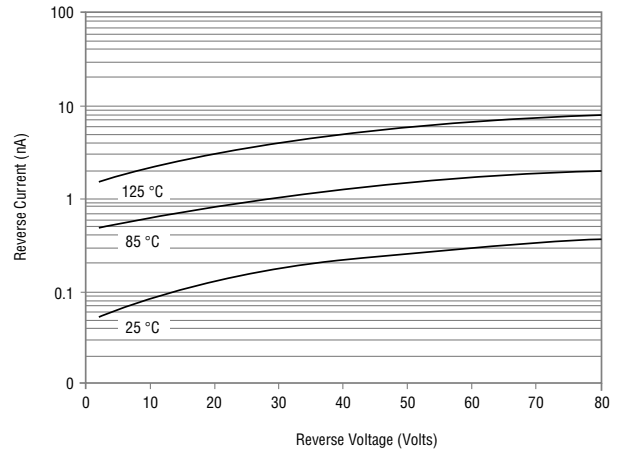
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Rating & Characteristic Curves: CDxxxx-S0180

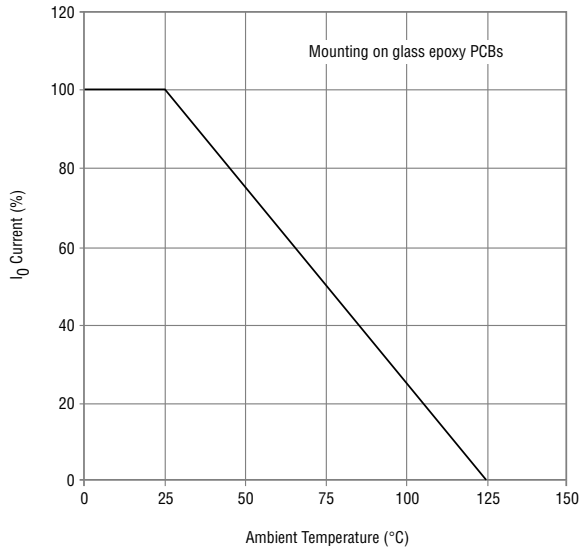
Forward Characteristics



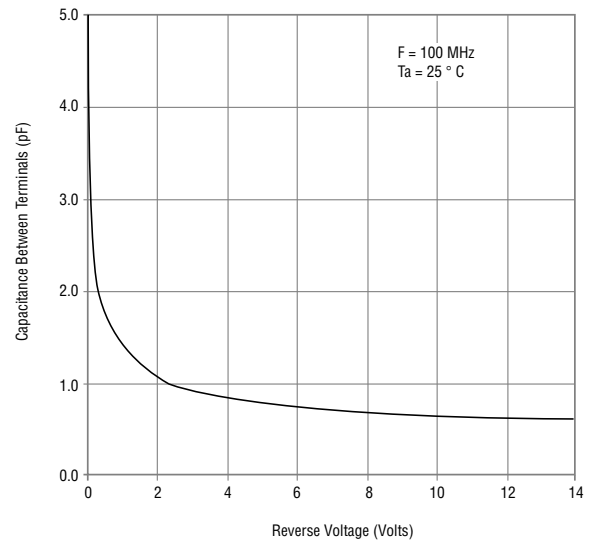
Reverse Characteristics



Derating Curve



Capacitance Between Terminals



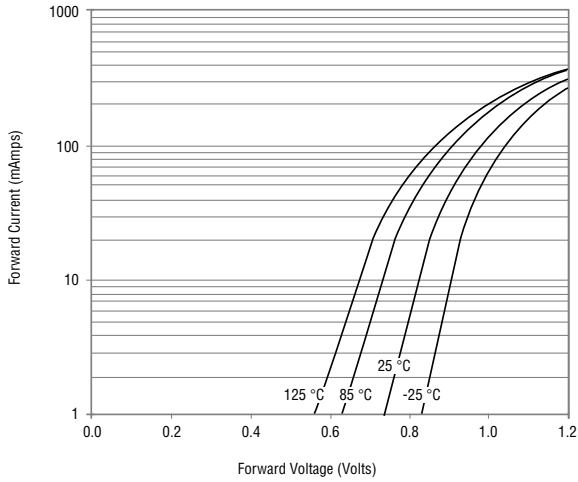
Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

Switching Chip Diode Series - 0603/1005

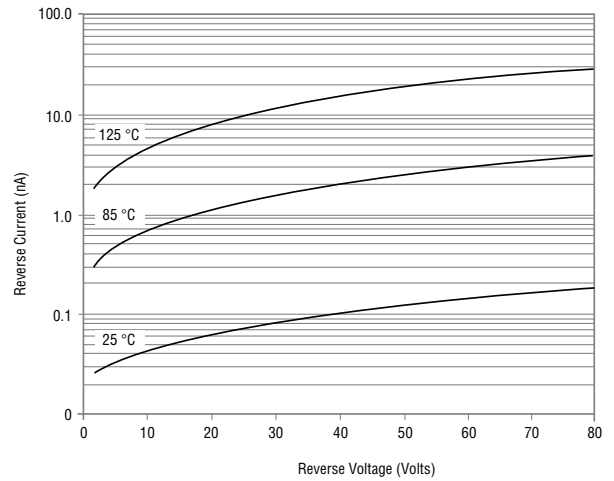
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Rating & Characteristic Curves: CD1005-S01575

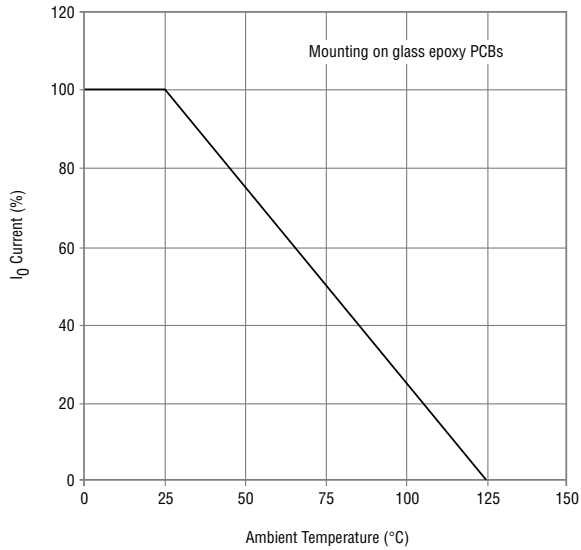
Forward Characteristics



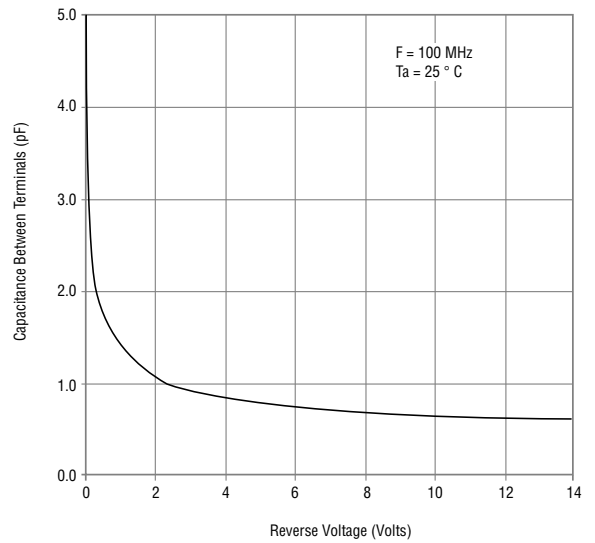
Reverse Characteristics



Derating Curve



Capacitance Between Terminals



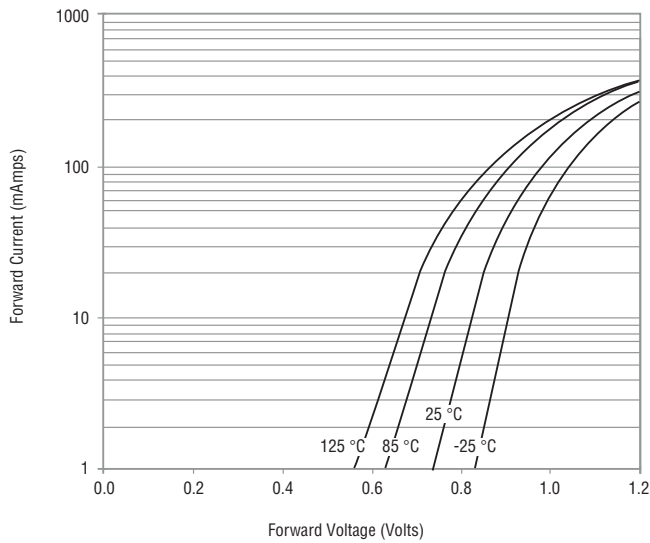
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Switching Chip Diode Series - 0603/1005

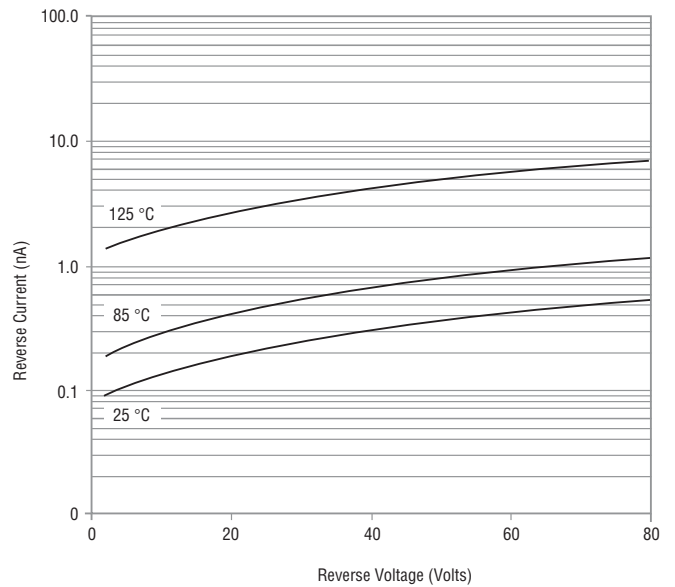
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Rating & Characteristic Curves: CDxxxx-S0180R

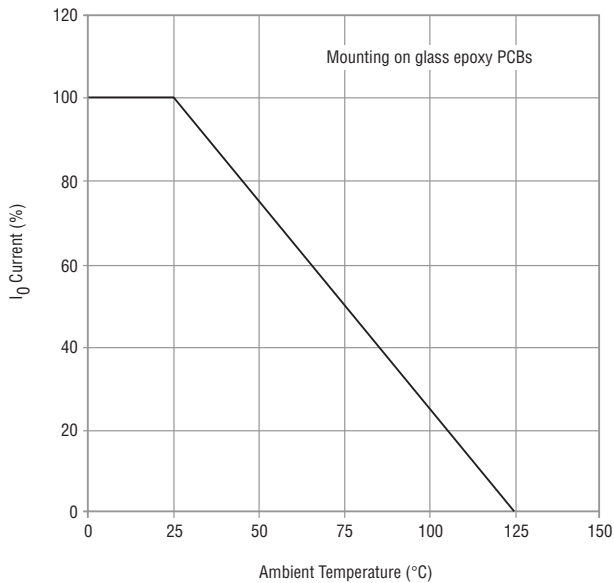
Forward Characteristics



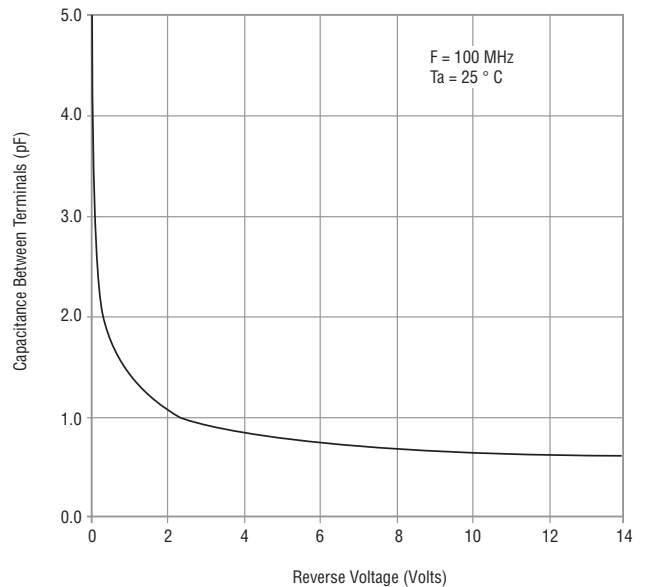
Reverse Characteristics



Derating Curve



Capacitance Between Terminals



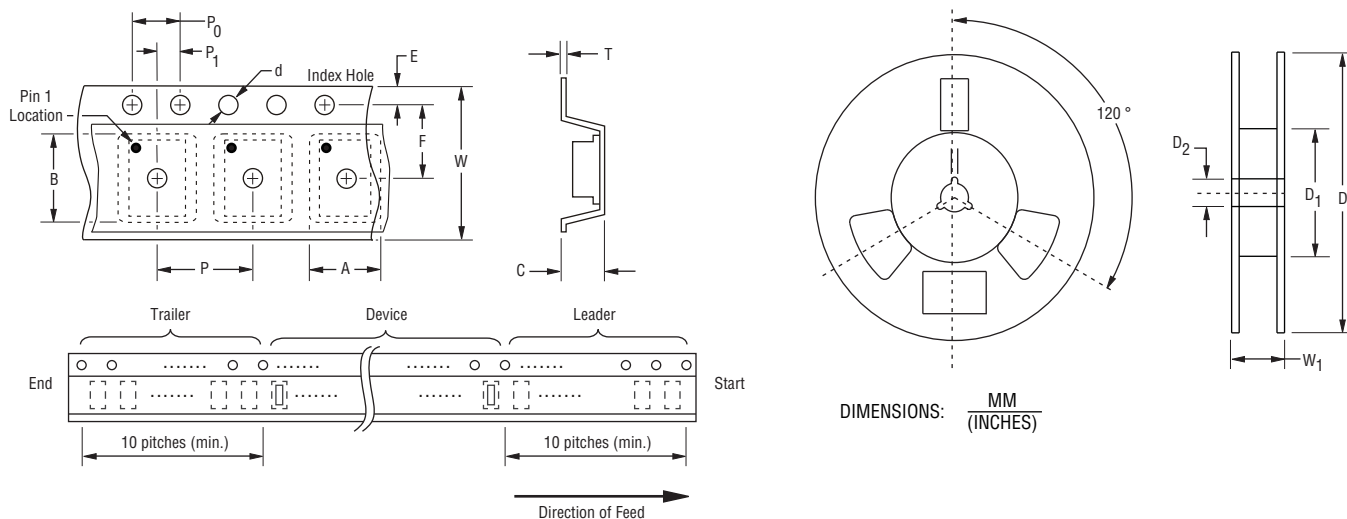
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Packaging Information

The product is packaged in tape and reel format per EIA-481 standard.



Item	Symbol	0603	1005
Carrier Width	A	$\frac{1.00 \pm 0.10}{(0.039 \pm 0.004)}$	$\frac{1.55 \pm 0.10}{(0.061 \pm 0.004)}$
Carrier Length	B	$\frac{1.85 \pm 0.10}{(0.073 \pm 0.004)}$	$\frac{2.65 \pm 0.10}{(0.104 \pm 0.004)}$
Carrier Depth	C	$\frac{1.00 \pm 0.10}{(0.039 \pm 0.004)}$	$\frac{1.05 \pm 0.10}{0.041 \pm 0.004}$
Sprocket Hole	d	$\frac{1.55 \pm 0.05}{(0.061 \pm 0.002)}$	$\frac{1.55 \pm 0.10}{(0.061 \pm 0.004)}$
Reel Outside Diameter	D	$\frac{178}{(7.008)}$	$\frac{178}{(7.008)}$
Reel Inner Diameter	D ₁	$\frac{60.0}{(2.362)}$ MIN.	$\frac{60.0}{(2.362)}$ MIN.
Feed Hole Diameter	D ₂	$\frac{13.0 \pm 0.20}{(0.512 \pm 0.008)}$	$\frac{13.0 \pm 0.20}{(0.512 \pm 0.008)}$
Sprocket Hole Position	E	$\frac{1.75 \pm 0.10}{(0.069 \pm 0.004)}$	$\frac{1.75 \pm 0.10}{(0.069 \pm 0.004)}$
Punch Hole Position	F	$\frac{3.50 \pm 0.05}{(0.138 \pm 0.002)}$	$\frac{3.50 \pm 0.05}{(0.138 \pm 0.002)}$
Punch Hole Pitch	P	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$
Sprocket Hole Pitch	P ₀	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$
Embossment Center	P ₁	$\frac{2.00 \pm 0.05}{(0.079 \pm 0.002)}$	$\frac{2.00 \pm 0.05}{(0.079 \pm 0.002)}$
Overall Tape Thickness	T	$\frac{0.20 \pm 0.05}{(0.008 \pm 0.002)}$	$\frac{0.25 \pm 0.05}{(0.010 \pm 0.002)}$
Tape Width	W	$\frac{8.00 \pm 0.20}{(0.315 \pm 0.008)}$	$\frac{8.00 \pm 0.20}{(0.315 \pm 0.008)}$
Reel Width	W ₁	$\frac{13.5}{(0.531)}$ MAX.	$\frac{13.5}{(0.531)}$ MAX.
Quantity per Reel	--	4,000	4,000

REV. 12/15

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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Bourns:](#)

[CD1005-S01575](#) [CD0603-S01575](#) [CD0603-S0180R](#) [CD1005-S0180](#) [CD0603-S0180](#) [CD1005-S0180R](#)