

KNOX SEMICONDUCTOR, INC.

GENERAL PURPOSE ABRUPT VARACTOR DIODES

MV2101 - MV2115

MV2201 - MV2215

TYPE NUMBER	CAPACITANCE @ -4 Vdc 1 MHz (pF)	MIN QUALITY FACTOR Q @ -4 Vdc f = 50 MHz	CAPACITANCE RATIO C•2V / C•30V MIN	CAPACITANCE RATIO C•1V / C•10V MIN
MV2101	6.8	450	2.5	
MV2102	8.2	450	2.5	
MV2103	10.0	400	2.5	
MV2104	12.0	400	2.5	
MV2105	15.0	400	2.5	
MV2106	18.0	350	2.5	
MV2107	22.0	350	2.5	
MV2108	27.0	300	2.5	
MV2109	33.0	200	2.5	
MV2110	39.0	150	2.5	
MV2111	47.0	150	2.5	
MV2112	56.0	150	2.6	
MV2113	68.0	150	2.6	
MV2114	82.0	100	2.6	
MV2115	100.0	100	2.6	
MV2201	6.8	300		1.9
MV2203	10.0	200		2.0
MV2205	15.0	200		2.0
MV2207	22.0	150		2.0
MV2209	33.0	150		2.0
MV2211	47.0	100		2.0
MV2213	68.0	100		2.0
MV2215	100.0	50		2.0

MAXIMUM RATINGS

Package Style

DC Power Dissipation

Reverse Breakdown Voltage

Max Reverse Current (I_R)

Max Reverse Current (I_{R2})

Operating Temperature (T_{opr})

Storage Temperature (T_{stg})

Capacitance Tolerance:

@ $T_a = 25^\circ\text{C}$
 @ $10\mu\text{A @ } 25\text{ Vdc}$
 @ $T_a = 25^\circ\text{C}$
 @ $T_a = 150^\circ\text{C}$

Standard Device

Suffix A

Suffix B

Suffix C

Suffix D

MV2101 - MV2115

DO-7

400 mW

30 V

$0.02\mu\text{A @ } 25\text{ Vdc}$

$20\mu\text{A @ } 25\text{ Vdc}$

$-65\text{ to } +175^\circ\text{C}$

$-65\text{ to } +200^\circ\text{C}$

$\pm 20\%$

$\pm 10\%$

$\pm 5\%$

$\pm 2\%$

$\pm 1\%$

MV2201 - MV2215

DO-7

400 mW

25 V Min

$0.02\mu\text{A @ } 20\text{ Vdc}$

$20\mu\text{A @ } 20\text{ Vdc}$

$-65\text{ to } +175^\circ\text{C}$

$-65\text{ to } +200^\circ\text{C}$

$\pm 20\%$

$\pm 10\%$

$\pm 5\%$

$\pm 2\%$

$\pm 1\%$