RoHS COMPLIANT e4 RoHS

DESCRIPTION

This series of surface mount capacitors utilize new and unique monolithic MMSM® technology. The technology is a package/device integration accomplished at the wafer fabrication level. Since interconnections utilize precision photolithographic techniques rather than wire bonds, parasitic package inductance is tightly controlled. The package parasitics provide smooth non-resonant functionality through X Band. Microsemi utilizes high quality dielectric materials resulting in exceptional Quality Factor (Q) and lowest loss. Insertion loss is typically less than 0.2 db over the working frequency range. This series of devices meets RoHS requirements per EU Directive 2002/95/EC.

APPLICATIONS

The MPC8000 MMSM® capacitors are used in RF circuits for dc blocks, capacitive coupling and RF bypass. They are used for fixed capacitive tuning of oscillators, multipliers or filter elements.

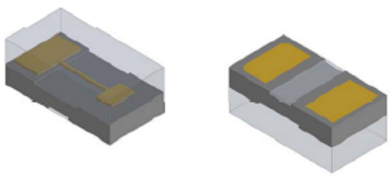
KEY FEATURES

- Low parasitics
  L_P = 0.02nH Typical
  C_P = 0.04pF Typical
- Surface Mount design
- Broadband Performance through X-Band
- Available on Tape & Reel for automated pick & place assembly
- Small, SOD 323 Footprint
- RoHS Compliant [1]

1- These devices are supplied with gold terminations.

APPLICATIONS/BENEFITS

- DC Blocks
- Capacitive coupling
- RF Bypass
- Fixed Filter Elements



ABSOLUTE MAXIMUM RATINGS AT 25° C (UNLESS OTHERWISE SPECIFIED)

Rating	Symbol	Value	Unit
Maximum Leakage Current @80% of minimum Rated V_B	I_R	10	nA
Operating Temperature	T_{OP}	-55 to +125	°C
Storage Temperature	T_{STG}	-55 to +125	°C

IMPORTANT: *For the most current data, consult our website:* ***www.MICROSEMI.com***
Specifications are subject to change. Consult factory for latest information .

These devices are ESD sensitive and must be handled using ESD precautions.

www.MICROSEMI.com

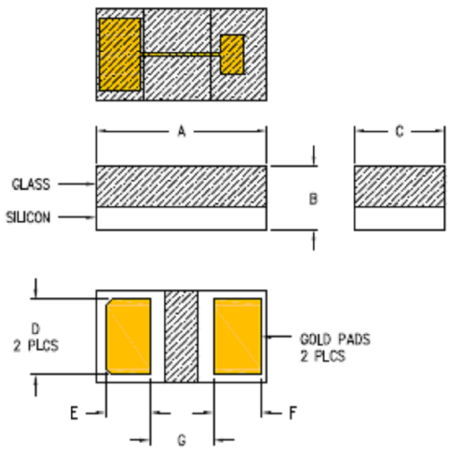
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DEVICE ELECTRICAL PARAMETERS @ 25 °C (unless otherwise specified)

Model Number	V_B (V) (Min)	C_T(pF)[1]	Tolerance (+/-%)
MPC8010	100	1.0	15
MPC8020	100	2.0	10
MPC8050	100	5.0	10
MPC8100	100	10.0	10
MPC8200	100	20.0	10
MPC8300	100	30.0	10

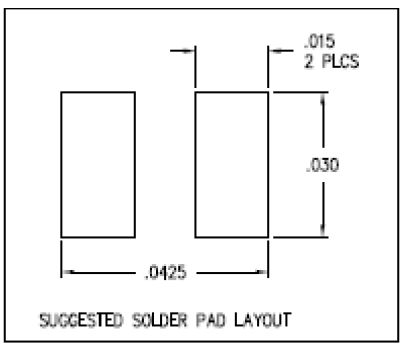
Notes
1- Capacitance is measured at f = 1 MHz.

PACKAGE STYLE 306



DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.038	0.048	0.965	1.219
B	0.011	0.021	0.279	0.533
C	0.018	0.028	0.457	0.711
D	0.014	0.024	0.356	0.610
E	0.006	0.016	0.152	0.406
F	0.007	0.017	0.178	0.432
G	0.011	0.021	0.279	0.533

SOLDER PAD LAYOUT



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