

## HIGH POWER SURFACE MOUNT CIRCULATORS / ISOLATORS FROM REC



SMC SERIES

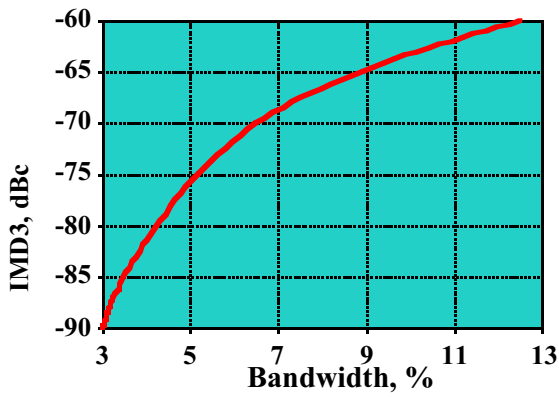
Recognizing future telecommunication market demands, Renaissance Electronics Corporation (REC) introduced a new line of one-inch square size surface-mount coplanar, circulators and isolators for high-power applications (SMC series). These circulators are distinguished by superior high power performance in congested multi-carrier environment.

### FEATURES:

- Inherently Coplanar Structure for Surface Mount Applications
- Compliant with Pick-and-Place Assembly Process
- Magnetically Shielded
- Reflow Solder Compatible
- Low Loss, High Power and Temperature Stable Design
- 3rd Order Intermodulation Better Than -75dBc
- AMPS, DECT, GPS, PCS, DCS, UMTS & IMT 2000

### CHARACTERISTICS:

Part Number	Frequency MHz	Isolation dB min	Insertion loss dB max	VSWR max	Power, Watts			Operating Temp °C
					Fwd	Rev	Peak	
<b>CIRCULATOR</b>								
3SMC2NC	824 - 849	22	0.35	1.22	100		500	-10 to +80
3SMC2NA	869 - 894	22	0.35	1.22	100		500	-10 to +80
3SMC2ND	880 - 915	22	0.35	1.22	100		500	-10 to +80
3SMC2NB	925 - 960	22	0.35	1.22	100		500	-10 to +80
3SMC4NJ	1805 - 1880	22	0.35	1.22	100		500	-10 to +80
3SMC4NH	1930 - 1990	22	0.35	1.22	100		500	-10 to +80
3SMC4NM	2110 - 2170	22	0.35	1.22	100		500	-10 to +80
3SMC4NN	2095 - 2185	22	0.35	1.22	100		500	-10 to +80
<b>ISOLATOR</b>								
2SMC2ND	824 - 849	22	0.35	1.22	100	5	500	-10 to +80
2SMC2NB	869 - 894	22	0.35	1.22	100	5	500	-10 to +80
2SMC2NA	880 - 915	22	0.35	1.22	100	5	500	-10 to +80
2SMC2NC	925 - 960	22	0.35	1.22	100	5	500	-10 to +80
2SMC2NE	935 - 960	22	0.35	1.20	60	70	500	-10 to +80
2SMC4NG	1805 - 1880	22	0.35	1.22	100	5	500	-10 to +80
2SMC4NK	1805 - 1880	22	0.35	1.20	50	70	500	-10 to +80
2SMC4ND	1930 - 1990	22	0.35	1.22	100	5	500	-10 to +80
2SMC4NC	2110 - 2170	22	0.35	1.22	100	5	500	-10 to +80
2SMC4NC-1	2100 - 2200	22	0.35	1.22	100	70	1000	-10 to +80

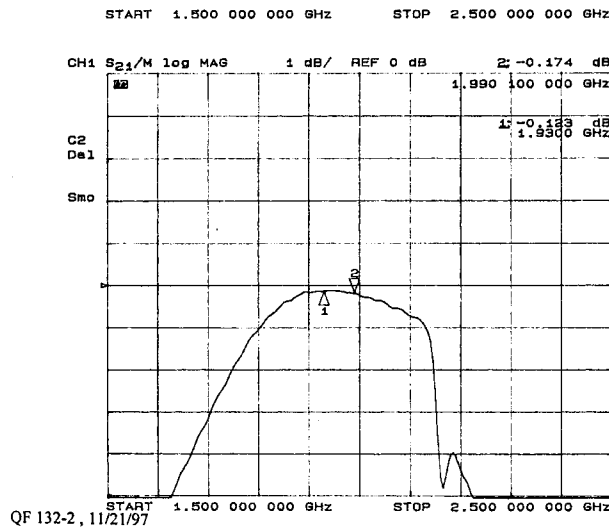


The graph illustrates the tradeoff between the available bandwidth and IMD performance measured with 2 input 46 dBm tones spaced at 1 MHz.

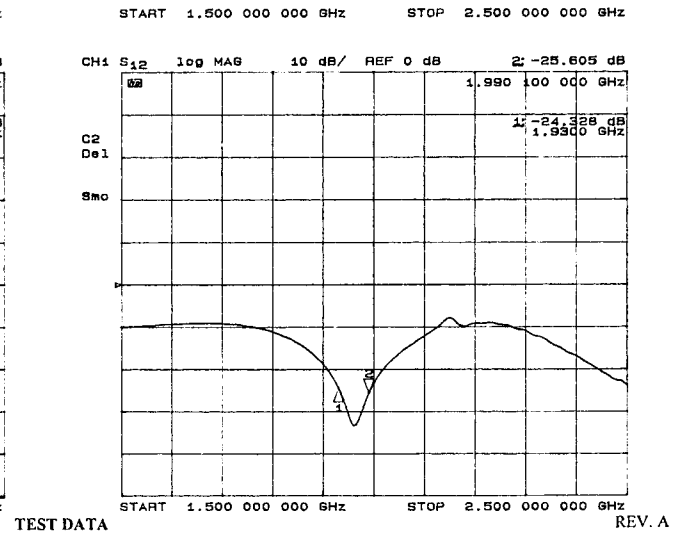
IMD PERFORMANCE

### DATA FOR SINGLE JUNCTION SMC CIRCULATOR

INSERTION LOSS



ISOLATION



DOUBLE JUNCTION ISOLATOR

#### CHARACTERISTICS:

Part Number	Frequency MHz	Isolation dB min	Insertion loss dB max	VSWR max	Power, Watts			Operating Temp °C
					Fwd	Rev	Peak	
<b>DOUBLE JUNCTION ISOLATOR</b>								
2SMCD4NA	1805 - 1880	40	0.6	1.22	100	5	500	-10 to +80
2SMCD4NB	1930 - 1990	40	0.6	1.22	100	5	500	-10 to +80