



Microwave Ferrite Devices

Circulators/Isolators

Low Insertion Loss

Reducing isolator insertion loss directly translates into higher output efficiency and lower heat dissipation when used in higher power applications. SDP's new ultra low-loss circulators/-isolators offer insertion loss **less than 0.15dB**, over temperature (actual production results range from 0.09dB to 0.12dB), while keeping all other "S" parameters such as return loss - and isolation better than 23 dB.

Units with various "S" parameters trade-offs are also available upon request.

Body Width	Insertion Loss*	Isolation*	Return Loss*
3/4"	<0.15dB	>23dB	>23dB
1"	<0.15dB	>23dB	>23dB

*Over temperature
Available in many frequency variations including CDMA, UMTS, DCS, PCS, GSM, and AMP. Parameters tested over operating range of -10C to +80C.

Low IMD

In the multi-carrier environment, avoiding intermodulation distortion is key to enhanced overall performance of the system. SDP is very proud to provide a mass-producible design that has such good 3rd order IMD performance, we guarantee -82dBc for two or eight tone carriers, over temperature. Typically our units provide better than -85dBc and in many cases this value is as low as -90dBc.

Like all SDP circulators/isolators, these Low-IMD devices are neodymium (NdFeB) free and can be BeO free as well upon request. Termination options and high power alternatives are available.

Body Width	3rd Order IMD*		Insertion Loss*	Isolation*	Return Loss*
	Typical	Guaranteed			
3/4"	-86dBc	-82dBc	<0.25dB	>22dB	>22dB
1"	-85dBc	-82dBc	<0.25dB	>22dB	>22dB

*Over temperature
Available in many frequency variations including 3G, CDMA, PCS and others. Parameters tested over operating range of -10C to +80C.

