

**E-Series Coupler**  
5 – 1000 MHz

**EMDC-10-1**  
**V4**

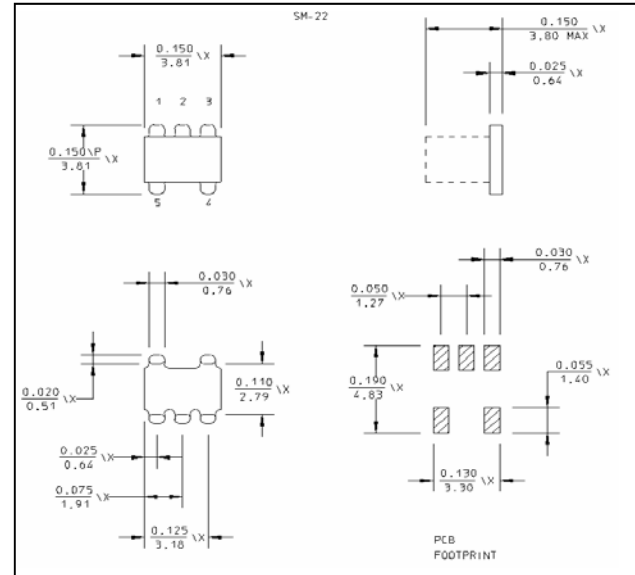
**Features**

- Coupling 10 dB Typical
- Surface Mount
- Tape and reel packaging available

**Description**

M/A-COM's EMDC-10-1 is a broadband coupler in a low cost, surface mount package. It offers low loss, good isolation, good input/output matching and exceptional coupling repeatability. Ideally suited for high volume cellular and wireless applications. Parts are packaged in tape & reel.

**SM - 22 Package**



**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$ <sup>1</sup>**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	5 - 1000	MHz	—	—	—
Coupling	$F_L-f_U$	5 - 1000	dB	—	—	10 $\pm$ 0.9
Main Line Loss	$F_L-f_U$	5 - 50	dB	—	1.1	1.6
		50 - 500	dB	—	1.0	1.4
		500 - 1000	dB	—	1.2	2.3
Directivity	$F_L-f_U$	5 - 50	dB	17	20	—
		50 - 500	dB	15	19	—
		500 - 1000	dB	10	17	—
Return Loss	$F_L-f_U$	5 - 1000	dB	14	17	—

**Absolute Maximum Ratings<sup>1</sup>**

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

1. Operation of this device above any one of these parameters may cause permanent damage.

**Ordering Information**

Part Number	Package
EMDC-10-1TR	Tape and Reel (2000 piece Reel)

## Pin Configuration

Pin No.	Function
1	Input
2	Ground
3	Coupled
4	External 50 Ohms
5	Output