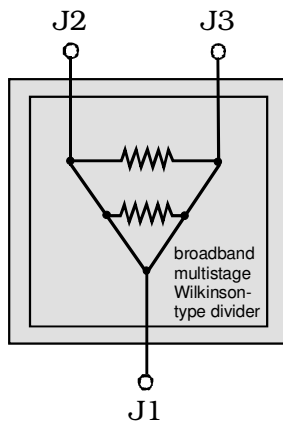


Typical Applications

The K-WPD-3G-1 is ideal for:

- in-phase power splitting
- balanced amplifiers
- two-tone intermodulation testing:
source power combiner
- general test and instrumentation

Block Diagram



Features

- broadband design: one decade bandwidth in a single package
- high isolation
- low excess loss
- excellent flatness
- excellent phase match
- very good port match
- custom modifications possible

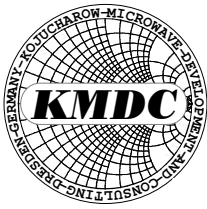
Electrical Specifications

Parameter	Min.	Typ.	Max.	Unit	Remark
RF operating frequency f :	0.3		3	GHz	1), 2)
Insertion loss IL , J1-J2 or J1-J3:	3.5		4.2	dB	2)
Port return loss RL (J1, J2, J3):	18	20		dB	0.4.....2.9 GHz
Port return loss RL (J1, J2, J3):	15	18		dB	<0.4, >2.9 GHz
Isolation $Isol.$ (J2-J3)	25			dB	0.5.....2.8 GHz
Isolation $Isol.$ (J2-J3)	14.5		25	dB	0.3.....0.5 GHz
Isolation $Isol.$ (J2-J3)	17		25	dB	2.8.....3.0 GHz
Phase match $\Delta\phi$ (J1-J2/J1-J3)		0.1	0.3	deg	
Temp.-range:	0		50	°C	

- 1) extended range versions available upon request – please call
 2) unit can be used in from 0.2...3.4 GHz, in this case $IL < 4.7$ dB, $RL > 10$ dB, $Isol. > 10$ dB

Absolute Maximum Ratings

Parameter	Min.	Typ.	Max.	Unit	Remark
Input power splitting mode:	0		23	dBm	
Total power dissipation			100	mW	
DC level, any port			40	V	

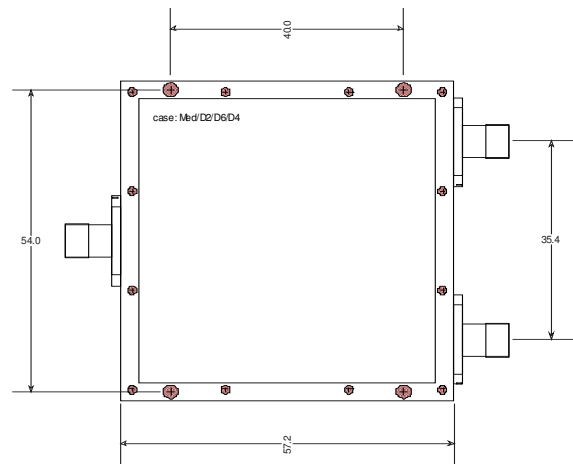


Ports and Interfaces

Name	Function	Parameter
J1	common (sum) Port 1	SMA female
J2	Port 2, reference phase	SMA female
J3	Port 3, 0 deg. rel. to reference phase	SMA female

Mechanical Construction

The following standard mechanical layout is used for the module. The unit is incorporated in a dedicated milled RF enclosure with separate top and bottom shielding covers. Mounting holes are provided.



Mechanical configuration of the module, milled aluminium enclosure, SMA (f) ports.

The standard dimensions are 52.7x52.7x11 mm³ plus connectors. Please call for custom modifications on size, port layout or other special configurations.

Order Information

Please specify:

- K-WPD-3G-1 for standard device
- K-WPD-3G-1/X for a requested custom design, please specify:
-frequency range, port layout