



# DOUBLE-RIDGE TO RECTANGULAR WAVEGUIDE TRANSITIONS R30 SERIES

DATA  
SHEET  
No. T8F  
1 of 2

- LOW VSWR
- WIDE SELECTION
- FUNDAMENTAL & OVER-MODED TYPES

## DESCRIPTION

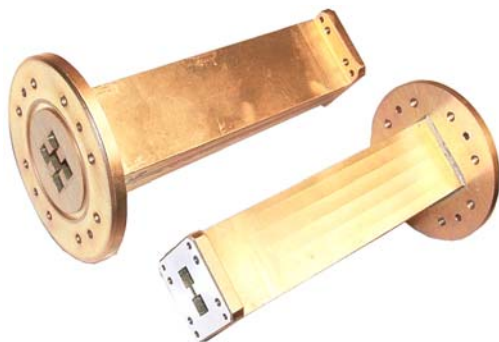
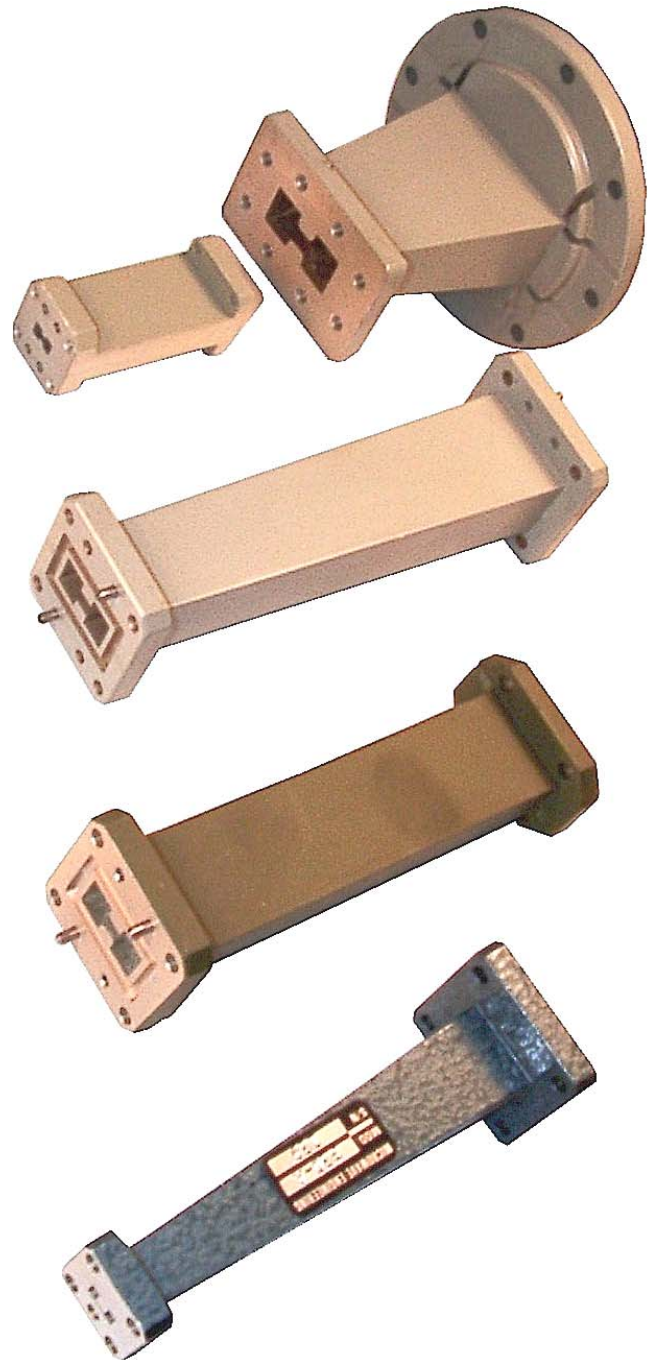
These precisely machined transitions allow connection of double-ridge waveguides to rectangular waveguides or other ridge guides with low insertion loss and good match. In the overlapping frequency band common to both waveguides, VSWR is 1.06:1 max.

These transitions are most suitable for laboratory set-ups to measure double-ridge components with rectangular waveguide test equipment and vice versa. Special narrow frequency bands may be requested to yet more stringent requirements.

Matched transitions are also offered which transform a ridge waveguide into several rectangular waveguides operating ABOVE the fundamental frequency band of the ridge guide. Such over-moded transformers are needed in order to measure suppression characteristics of harmonic absorption filters and other wideband components. Coverage is available up to the second and third harmonic of the double-ridge fundamental frequency band. Excitation of higher order modes in the transitions themselves is minimized so as not to degrade measurement accuracy.

The attached table lists the transition model numbers and maximum lengths for the fundamental and over-moded types.

Material is aluminum. Finish is chromate conversion per MIL-C-5541, Class 3, painted with gray epoxy enamel. Other lengths, bands and types may also be requested.



Data subject to change without notice

**m.e.c**

**MICROWAVE ENGINEERING CORPORATION**

1551 STREET, NORTH ANDOVER, MA 01845 • TEL (978) 685-2776 • FAX (978) 975-4363 • Website: <http://www.microwaveeng.com/> • Email: [sales@microwaveeng.com](mailto:sales@microwaveeng.com)



# DOUBLE-RIDGE TO RECTANGULAR WAVEGUIDE TRANSITIONS R30 SERIES

**DATA  
SHEET  
No. T8F  
2 of 2**

## MODEL NUMBERS AND LENGTHS OF DOUBLE-RIDGE TO RECTANGULAR WAVEGUIDE TRANSITIONS

DOUBLE-RIDGE WAVEGUIDE				RECTANGULAR WAVEGUIDE																	MEC FLATGUIDE				
				FREQ. (GHz)	26.5-40.0	22.0-33.0	18.02-26.5	15.0-22.0	12.4-18.0	10.0-15.0	8.2-12.4	7.0-11.0	7.05-10.0	5.85-8.2	4.90-7.05	3.95-5.85	3.30-4.90	2.60-3.95	2.25-3.30	1.70-2.60	1.12-1.70	1.0-1.46	7.5-18.0	7.0-18.0	4.3-10.5
				WR-	28	34	42	51	62	75	90	102	112	137	159	187	229	284	340	430	650	770	F750	F700	F400
BAND	A	Y	K	N	P	M	X	W	H	J	D	G	B	S	LS	LA	L	E	F10	F11	F12				
FREQ. (GHz)	WRD-	MODEL NO.	MEC FLANGE	FLANGE	UG-599/U*	M3922/63-10	UG-597/U	M3922/70-011	UG-1665/U	M3922/53-008	UG-135/U	M3922/70-002	UG-138/U	UG-441/U	CMR-159	UG-407/U	CMR-229	UG-584/U	UG-554/U	UG-437B/U	UG-418/U	WR-770	F750 C1	F700 C1	F400 C1
18.0-40.0	180-C24	R35	180C1		R35-A 2.0	R35-Y 2.0	R35-K 2.0																		
11.0-26.5	110-C24	R36	110C1		R36-A 2.0	R36-Y 2.0	R36-K 2.0	R36-N 2.5	R36-P 2.5	R36-M 3.0	R36-X 3.0														
7.5-18.0	750-D24	R30	750C1		R30-A 6.0	R30-Y 6.0	R30-K 6.0	R30-N 4.0	R30-P 4.0	R30-M 4.5	R30-X 5.0	R30-W 5.0	R30-H 4.5										R30-F10 3.25	R30-F11 5.0	
6.5-18.0	650-D28	R37	650C1		R37-A 6.0	R37-Y 6.0	R37-K 6.0	R37-N 4.0	R37-P 4.0	R37-M 4.5	R37-X 5.0	R37-W 5.0	R37-H 4.5	R37-J 6.0									R37-F10 3.25	R37-F11 5.0	
5.8-16.0	580-D28	R38	580C1		R38-A 6.0	R38-Y 6.0	R38-K 6.0	R38-N 6.0	R38-P 4.0	R38-M 4.5	R38-X 5.0	R38-W 5.0	R38-H 4.5	R38-J 6.0	R38-D 6.0								R38-F10 3.25	R38-F11 5.0	
4.75-11.0	475-D24	R31	475C1		R31-A 6.0	R31-Y 6.0	R31-K 6.0	R31-N 6.0	R31-P 6.0	R31-M 6.0	R31-X 6.0	R31-W 5.0	R31-H 4.5	R31-J 5.8	R31-D 6.0	R31-G 6.0									R31-F12 6.0
4.8-11.0	DR-19	R39	DR19C1		R39-A 6.0	R39-Y 6.0	R39-K 6.0	R39-N 6.0	R39-P 6.0	R39-M 6.0	R39-X 6.0	R39-W 5.0	R39-H 4.5	R39-J 6.0	R39-D 6.0	R39-G 6.0									R39-F12 6.0
3.5-8.2	350-D24	R32	350C1			R32-Y 6.0	R32-K 6.0	R32-N 6.0	R32-P 6.0	R32-M 6.0	R32-X 6.0	R32-W 6.0	R32-H 6.0	R32-J 6.0	R32-D 6.0	R32-G 6.0	R32-B 6.0	R32-S 6.0							
2.0-4.8	200-D24	R33	200C1						R33-P 6.0	R33-M 6.0	R33-X 7.0	R33-W 7.0	R33-H 7.0	R33-J 8.0	R33-D 8.0	R33-G 9.0	R33-B 9.0	R33-S 9.0	R33-LS 9.0	R33-LA 9.0					
1.0-2.0	840-U24	R34	840C1											R33-J 12.0	R33-D 12.0	R33-G 12.0	R33-B 12.0	R33-S 12.0	R33-LS 9.0	R33-LA 9.0	R34-L 12.0	R34-E 12.0			

Over-Model Units shown in shaded area

**A WIDE SELECTION OF DOUBLE RIDGE TO DOUBLE RIDGE TRANSITIONS IS ALSO AVAILABLE.  
CONTACT MEC FOR ADDTION DETAILS**

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