GHz TECHNOLOGY
RF-MICROWAVE SILICON POWER TRANSISTORS

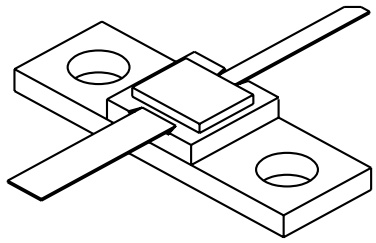
1719-8

8 Watts, 28 Volts, Class C
Microwave 1700 - 1900 MHz

GENERAL DESCRIPTION

The 1719-8 is a COMMON BASE transistor capable of providing 8 Watts, Class C output power over the band 1750-1850 MHz. The transistor includes input prematching for full Broadband capabiliy. Gold metalizaton and diffused ballasting are used to provide high reliability and supreme ruggedness. The transistor uses a fully hermetic High Temperature Solder Sealed package.

CASE OUTLINE
55LV, STYLE 1



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25ºC		30 Watts
Maximum Voltage and Current		
BVces	Collector to Emitter Voltage	50 Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	2.0 Amps
Maximum Temperatures		
Storage Temperature		- 65 to + 200ºC
Operating Junction Temperature		+ 200ºC

ELECTRICAL CHARACTERISTICS @ 25 ^{O}C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 1750 -1850 MHz	8.0			Watts
Pin	Power Input	Vcc = 28 Volts			1.75	Watts
Pg	Power Gain		7.0			dB
η**c**	Efficiency			40		%
VSWR$_1$	Load Mismatch Tolerance	Pout = 8.0 Watts			10:1	

BVces	Collector to Emitter Breakdown	Ic = 10 mA	50			Volts
BVebo	Emitter to Base Breakdown	Ie = 5 mA	3.5			Volts
Hfe	Current Gain	Vce = 5V, Ic = 500 mA	20		120	
Cob	Output Capacitance	Vcb = 28V, F = 1 MHz		15		pF
θ**jc**	Thermal Resistance	Tc = 25ºC			5.8	ºC/W

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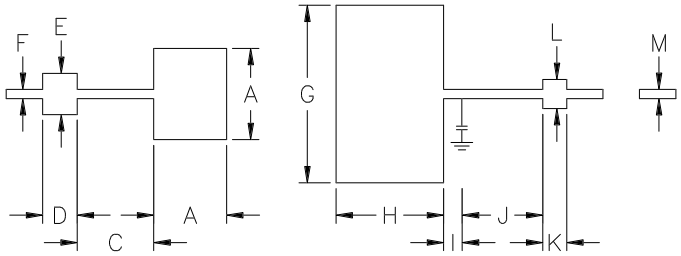
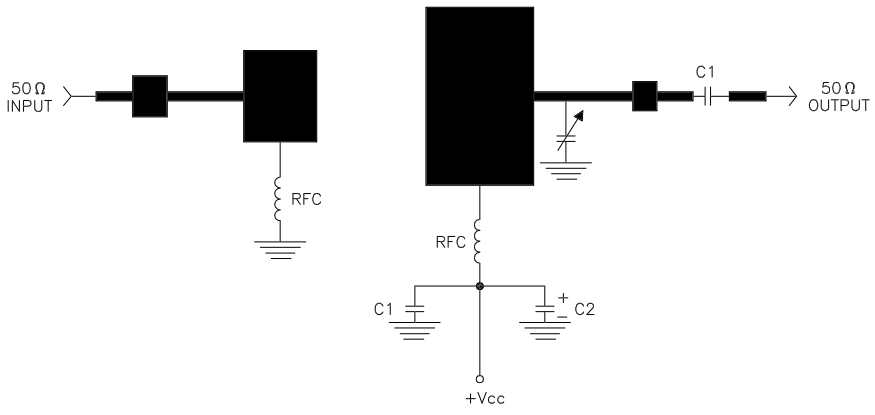
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



DIM	INCHES
A	.500
B	.400
C	.420
D	.190
E	.225
F	.050
G	.975
H	.590
I	.100
J	.445
K	.130
L	.160
M	.050

1719-8 TEST CIRCUIT



▬ = Microstrip on 0.020" Duroid, Er=2.3
C1 = ATC 68pF B-CASE
C2 = 50 MFD @ 50V

	CAGE	DWG NO.	REV
GHz TECHNOLOGY	0PJR2	1719-8	A
		SCALE 1/1	SHEET