Fax-on-Demand: 86-22-24207687 / 25-471-1126
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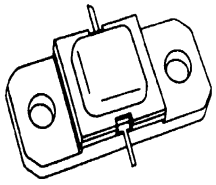
Before ordering check with
factory for most current data

672-1175M
RF & MICROWAVE TRANSISTORS
AVIONICS APPLICATIONS

Features

1025 – 1150 MHz
50 VOLTS
INTERNAL INPUT/OUTPUT MATCHING
P_{OUT} = 175 WATTS
G_P = 7.7 dB MINIMUM
COMMON BASE CONFIGURATION

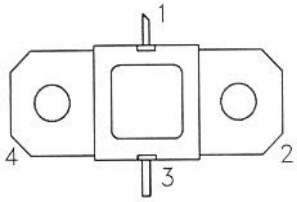


.400 x .400 2NLFL (M218)
hermetically sealed

DESCRIPTION:

The 672-1175M is a NPN bipolar transistor specifically designed for high peak pulse power applications such as DME/TACAN. This device is capable of withstanding a minimum 20:1 load VSWR at any phase angle under full rated conditions. Internal impedance matching provides consistent broadband performance.

PIN CONNECTION



1. Collector
2. Base
3. Emitter
4. Base

ABSOLUTE MAXIMUM RATINGS (Tcase = 25°C)

Symbol	Parameter	Value	Unit
P_{DISS}	Power Dissipation	400	W
I_C	Device Current	12	A
V_{CC}	Collector-Supply Voltage*	55	V
T_J	Junction Temperature	200	°C
T_{STG}	Storage Temperature	-65 to +200	°C

Thermal Data

$R_{TH(J-C)}$	Thermal Resistance Junction-case	0.3	°C/W

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RF & MICROWAVE TRANSISTORS
AVIONICS APPLICATIONS

ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

Symbol	Test Conditions		Value			
			Min.	Typ.	Max.	Unit
BV_{CBO}	I_C = 10 mA	I_E = 0 mA	65	---	---	V
BV_{EBO}	I_E = 1 mA	I_C = 0 mA	3.5	---	---	V
BV_{CER}	I_C = 15 mA	R_{BE} = 10 Ω	65	---	---	V
I_{CES}	V_{CE} = 50 V		---	---	12.5	mA
HFE	V_{CE} = 5 V	I_C = 1 A	15	---	120	---

DYNAMIC

Symbol	Test Conditions			Value			
				Min.	Typ.	Max.	Unit
P_{OUT}	f = 1025 - 1150 MHz	P_{IN} = 30 W	V_{CC} = 50 V	175	---	---	W
η_C	f = 1025 - 1150 MHz	P_{IN} = 30 W	V_{CC} = 50 V	40	---	---	%
G_P	f = 1025 - 1150 MHz	P_{IN} = 30 W	V_{CC} = 50 V	7.7	---	---	dB
Condition	Pulse Width = 10uS	Duty Cycle = 1%					

IMPEDANCE DATA

FREQ	Z_{IN} (Ω)	Z_{CL} (Ω)
1025 MHz	2.3 + j5.1	2.4 - j4.2
1090 MHz	2.0 + j4.5	2.0 - j3.5
1150 MHz	2.2 + j3.3	2.5 - j2.5

V_{CC} = 50V
P_{IN} = 30W

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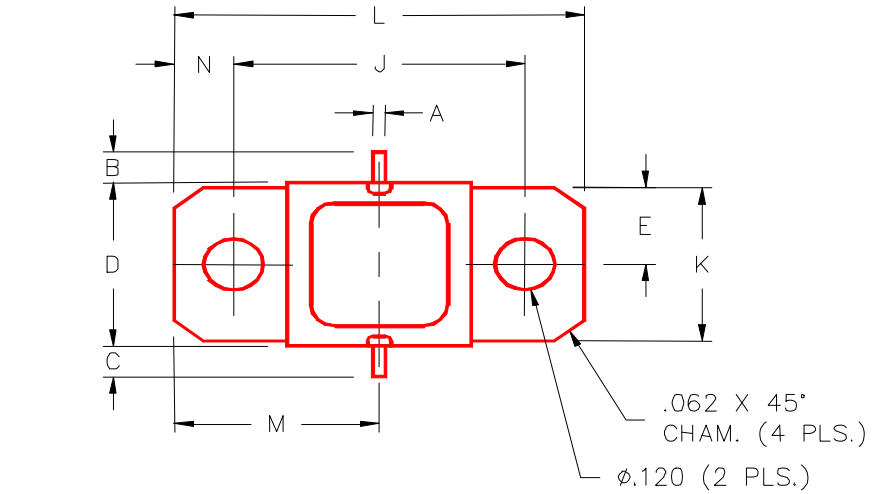
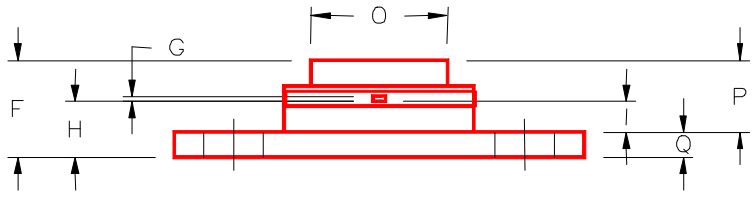
PACKAGE MECHANICAL DATA

PACKAGE STYLE M218





	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.025/0,64		J	.650/16,51	
B	.100/2,54		K	.386/9,80	
C	.100/2,54		L	.900/22.86	
D	.395/10,03	.407/10,34	M	.450/11,43	
E	.193/4,90		N	.125/3,18	
F		.230/5,84	O	.405/10,29	
G	.004/0,10	.007/0,18	P		.170/4,32
H	.118/3,00	.131/3,33	Q	.062/1,58	
I	.063/1,60				