

Fax-on-Demand: 86-22-24207687 / 25-471-1126

Tel-on-Demand: 86-22-24207688 / 25-471-1136

Before ordering check with
factory for most current data

672-1175M

**RF & MICROWAVE TRANSISTORS
AVIONICS APPLICATIONS**

Features

1025 – 1150 MHz

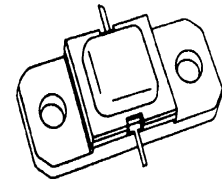
50 VOLTS

INTERNAL INPUT/OUTPUT MATCHING

$P_{OUT} = 175$ WATTS

$G_P = 7.7$ dB MINIMUM

COMMON BASE CONFIGURATION

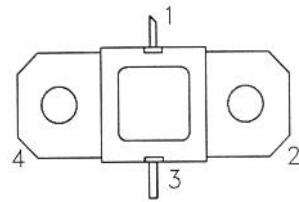


400 x .400 2NLFL (M218)
hermetically sealed

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 3. Emitter
2. Base 4. Base

ABSOLUTE MAXIMUM RATINGS (T_{case} = 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
---------------	----------------------------------	-----	------

Fax-on-Demand: 86-22-24207687 / 25-471-1126

Tel-on-Demand: 86-22-24207688 / 25-471-1136

Before ordering check with
factory for most current data

672-1175M

**RF & MICROWAVE TRANSISTORS
AVIONICS APPLICATIONS**

ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)

STATIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
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			Unit
				Min.	Typ.	Max.	
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

Fax-on-Demand: 86-22-24207687 / 25-471-1126

Tel-on-Demand: 86-22-24207688 / 25-471-1136

Before ordering check with
factory for most current data

672-1175M

**RF & MICROWAVE TRANSISTORS
AVIONICS APPLICATIONS**

PACKAGE MECHANICAL DATA

