

## GENERAL DESCRIPTION

The GG77015 is a complete surface mount limiter solution in a compact Enhanced Performance Surface Mount (EPSM) package. Usable performance extends from 10 MHz to 3000 MHz. No External Schottky biasing or complex DC choke return is required for this product. A simple shunt connection between your transmission line and RF and thermal ground is all that is required. EPSM packaging is renowned for smooth resonance free response over multi octave bandwidths and rugged mechanical construction.

## APPLICATIONS

The GG77015 is ideal for protecting the sensitive front end stages of UHF/Microwave receivers or low noise amplifier stages. It can also be used for interstage compression or system gain leveling at frequencies down to 10 MHz.

## KEY FEATURES

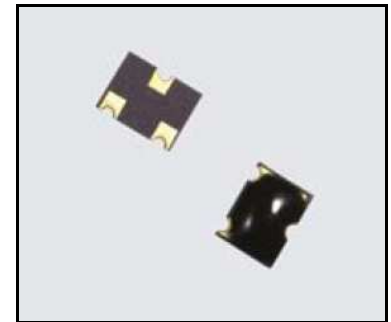
- 4W CW incident power handling
- Very low insertion loss
- Extremely smooth resonance free response
- Frequency response to > 3 GHz
- Tough EPSM construction for rugged environments

## APPLICATIONS/BENEFITS

- Receiver protection
- LNA protection
- No DC return or Schottky biasing needed
- Complete solution/no additional circuitry needed

## ABSOLUTE MAXIMUM RATINGS @ 25°C

Rating	Symbol	Value	Unit
Maximum Input Power (Pulsed)	$P_{IN}$	20	W
Storage Temperature	$T_{STG}$	-55 to +125	°C
Operating Temperature	$T_{OP}$	-55 to +125	°C



## ELECTRICAL PARAMETERS @ 25°C

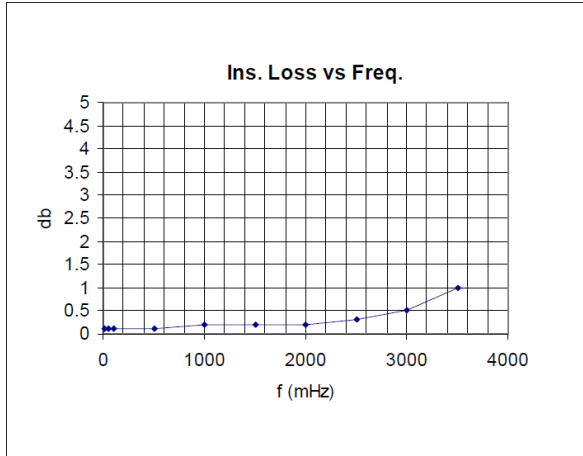
Model	Freq Range (MHz)	CW Power $P_{CW}$ (W) Max	Peak Power <sup>1</sup> $P_P$ (W) Max	Ins. Loss <sup>2</sup> IL(dB) Typ.	VSWR <sup>2</sup> Typ.	Flat Leakage <sup>3</sup> (dBm) Typ.			
						<= 1GHz	1.0-1.5GHz	1.5-1.85GHz	1.85-3.5GHz
GG77015-01	10 – 3000	4	20	0.50	1.5:1	15	18	20	23

Notes:

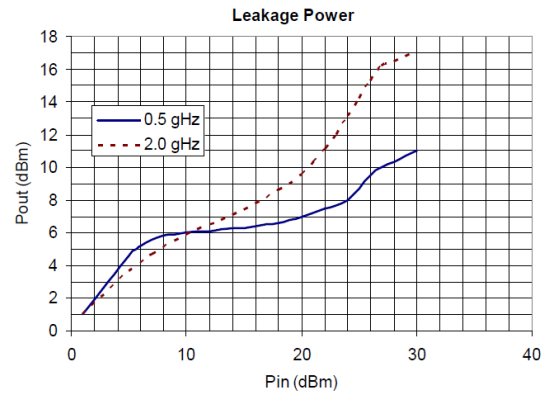
1. Pulse Width = 1usec, Duty Cycle = 0.001
2.  $P = -10$ dBm max
3.  $P = +30$ dBm, Pulse Width = 1usec, Duty Cycle = 0.001
4. RF Power Handling is linearly derated from full power at +25°C to zero power at +150°C

For the most current data, consult MICROSEMI's website: [www.MICROSEMI.com](http://www.MICROSEMI.com)  
Specifications are subject to change, consult the RFIS factory at (408) 986-8031 for the latest information.

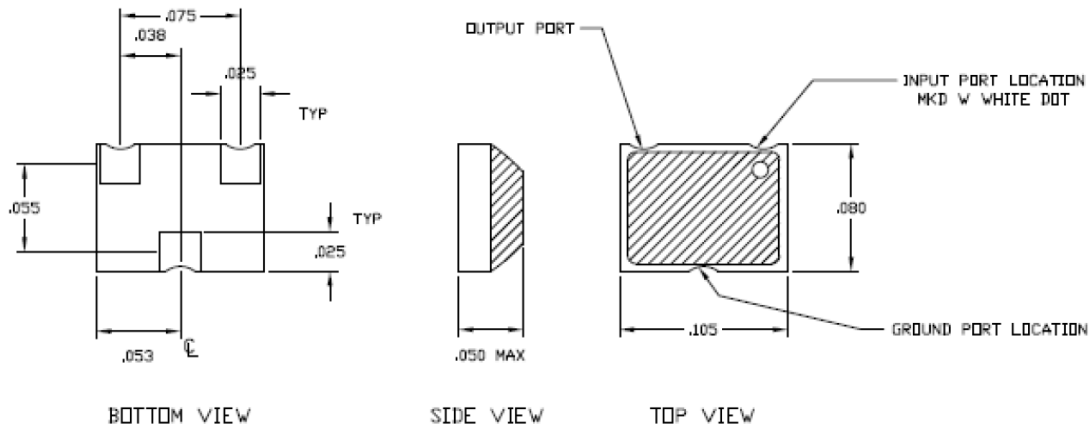
## INSERTION LOSS



## FLAT LEAKAGE



## OUTLINE 210207



### Notes:

1. The ground terminal must be soldered directly to an Electrical/Thermal ground in order to provide specified performance.
2. When using conductive epoxy for mounting/connection, the CW power handling is derated to 1 Watt at 25 deg C.
3. DC blocks are also required on either side of this device.



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# GG-77015-01

Control Devices  
Surface Mount Limiter Modules

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#### Revision History

Revision Level / Date	Para. Affected	Description
0.1 / 6 August 2012	-	Initial Preliminary Release

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