

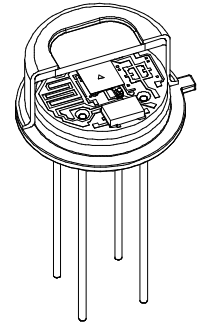
LME-500-#

3.0 x 3.0 mm² pyroelectric IR detector
current mode, JFET

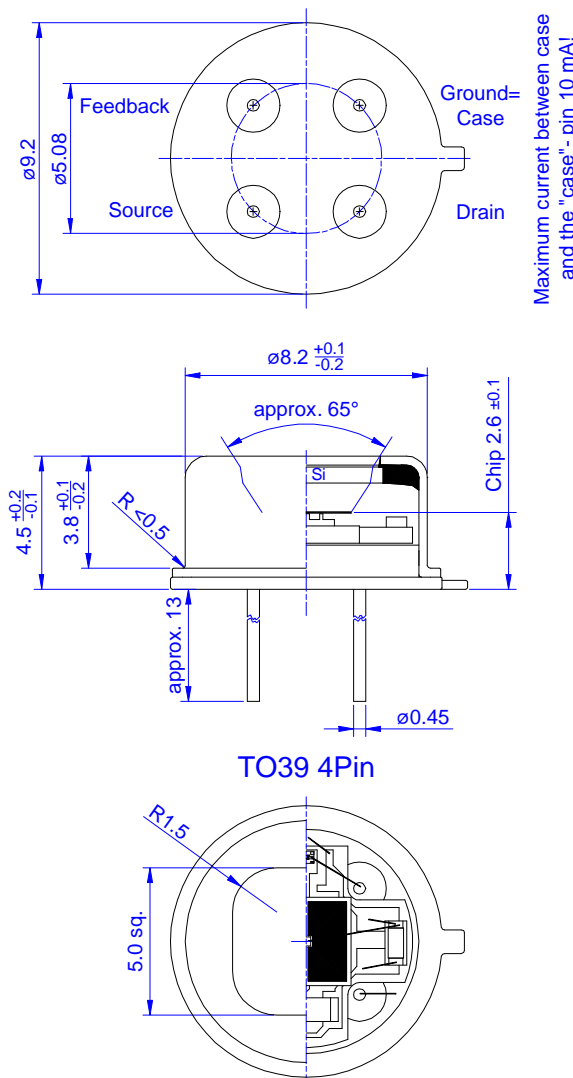
Description: LME-500-#

[# = extension code]

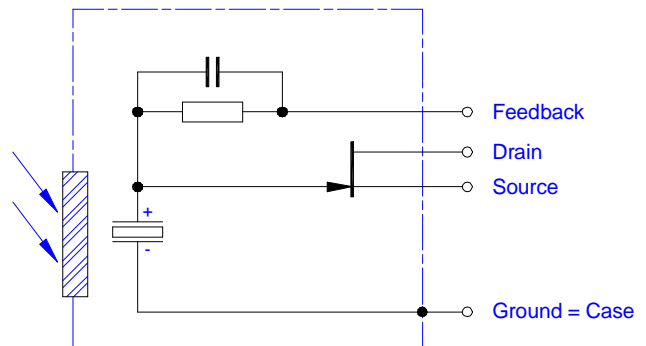
single element, area 3.0x3.0mm², ultra low microphonic effect;
for current mode, with JFET; feedback R 24GOhm ±10% // C 0.47±0.1pF



Housing:

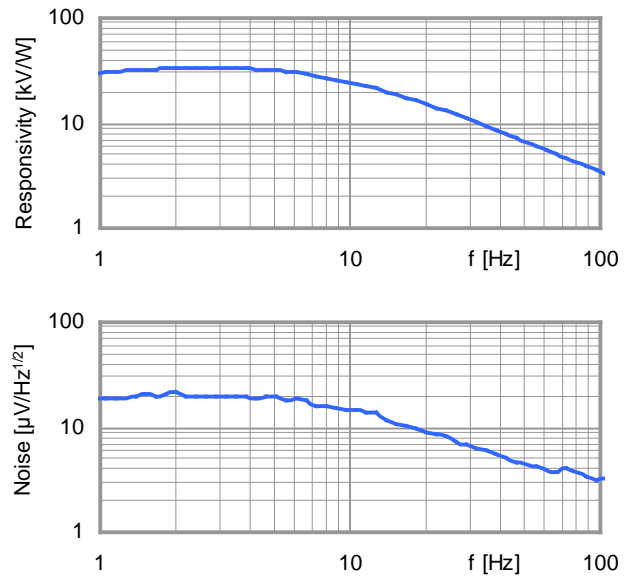


Pin assignment:



Standard Products

Frequency response:



InfraTec GmbH
Infrarotsensorik und Messtechnik
Gostritzer Str.61-63
01217 Dresden / Germany
E-Mail: sensor@InfraTec.de
http://www.InfraTec.de

distributed by:

ELECTRO OPTICAL COMPONENTS, Inc.
5460 Skylane Blvd.
Santa Rosa, California 95403

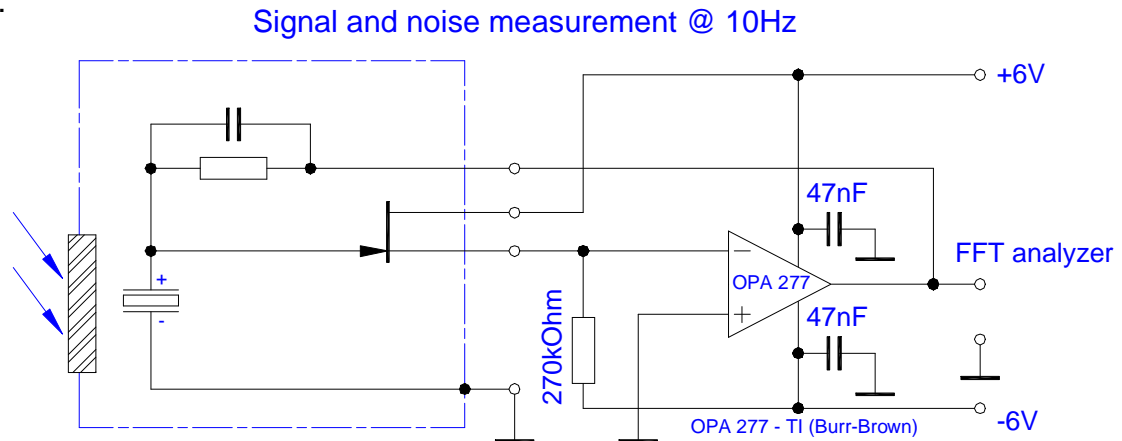


Tel: 707-568-1642
Fax: 707-568-1652
E-Mail: info@eoc-inc.com
http://www.eoc-inc.com

LME-500-#

3.0 x 3.0 mm² pyroelectric IR detector
current mode, JFET

Test circuit:



Parameters:

Element size / type	nom	3.0x3.0 mm ² lithium-tantalate with black layer
Aperture	nom	5.0 mm sq.
Thermal time constant	typ	200 ms
Feedback resistor	nom	24 GOhm ±10%
Feedback capacitor	nom	470±100 fF
Polarity (referred to output of test circuit)	nom	negative signal by positive IR flux change
Voltage responsivity {500K, 10Hz, 25°C, without window}	min	22,000 V/W
Noise density {10Hz, BW 1Hz, 25°C}	max	20.0 μV/Hz ^{1/2}
Detectivity {500K, 10Hz, 1Hz, 25°C, without window}	min	3.3*10 ⁸ cmHz ^{1/2} /W
Acceleration response {5 ... 200Hz}	typ	300 μV/g; g=9.81m/s ²
Offset voltage (feedback to source) {I _{Dopt.} =10-100μA}	nom	-0.4 ... -1.5 V
U _{DS}	max	18 V
Operating / Storage temperature	nom	-25 ... +85°C
Window cap		All InfraTec windows and filters are available (except KBr and CsI). Customized filters upon request.

InfraTec reserves the right to change these specifications at any time without notification!
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