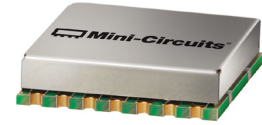


# Surface Mount Sequencing & DC Control Module

# NON-CATALOG

## VCM-1+



CASE STYLE: BG1482-1  
PRICE: Contact Sales Dept.

### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

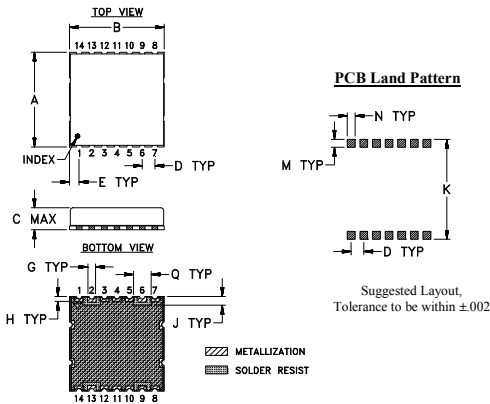
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Operating Temperature	-40°C to 85°C
Positive Input Voltage	+7.4V
Negative Input Voltage	-6.0V
Total DC	620 mA
Permanent damage may occur if any of these limits are exceeded.	

### Pad Description

NEGATIVE OUTPUT	2
POSITIVE OUTPUT	6
POSITIVE INPUT	9
NEGATIVE INPUT	13
GND	1,3,4,5,7,8,10,11,12,14

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.750	.750	.220	.100	.075	--	.060	.040
19.05	19.05	5.59	2.54	1.91	--	1.52	1.02
J	K	L	M	N	P	Q	wt
.070	.791	--	.063	.061	--	.140	grams
1.78	20.09	--	1.60	1.55	--	3.56	2.05

### Features

- Provides correct voltage sequence and DC control for the PHEMT amplifier [AVM-273HP+](#)
- Replaces over 20 discrete components
- Protection from reverse polarity

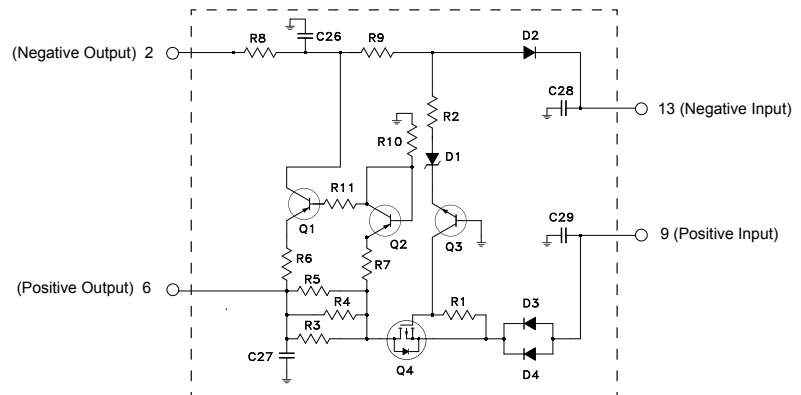
### Applications

- [AVM-273HP+](#) PHEMT Amplifier

### Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Units
Positive Input Voltage	+5.9	+6.1	+6.3	V
Negative Input Voltage	-5.5	-5.0	-4.5	V
Positive Output Voltage	--	+5.0	--	V
Negative Output Voltage	--	-0.8	--	V
Controlled DC from positive line	--	560	--	mA
Sinking DC to the negative line	--	-0.5	--	mA

### Schematic



### BOM

SEQ	Manufacturer P/N	Description	Manufacturer
Q1,Q2	MMBT3906	PNP Transistor	Fairchild Semiconductor
Q3	MMBT3904	NPN Transistor	Fairchild Semiconductor
Q4	NTS4101PT1G	P-Channel MOSFET	ON Semiconductor
D1	MMSZ5228BT1G	Zener Diode	ON Semiconductor
D2-D4	MBR0520LT1G	Schottky Diode	ON Semiconductor
C26,C27	GRM1555C1H101GA01D	0402 Capacitor, 100 pF, 2%	Murata Electronics
C28,C29	GRM188R71C105KA12D	0603 Capacitor, 1µF	Murata Electronics
R1,R2,R9,R10	RK73H1JTTD1002F	0603 Resistor, 10kΩ	KOA Speer
R3-R5	RK73H2BTTD3R32F	1206 Resistor, 3.32 Ω	KOA Speer
R6	RK73H1JTTD1000F	0603 Resistor, 100 Ω	KOA Speer
R7	RK73H1JTTD1501F	0603 Resistor, 1.5 kΩ	KOA Speer
R8	RK73H1JTTD1001F	0603 Resistor, 1.0 kΩ	KOA Speer
R11	RK73Z2BTTD	1206 Resistor, 0 Ω	KOA Speer

### Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.  
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
 C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)

