

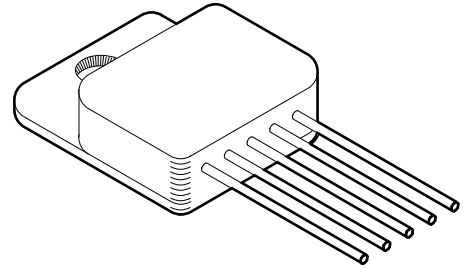


RAD HARD ULTRA LOW DROPOUT POSITIVE LINEAR REGULATOR

5920RH

FEATURES:

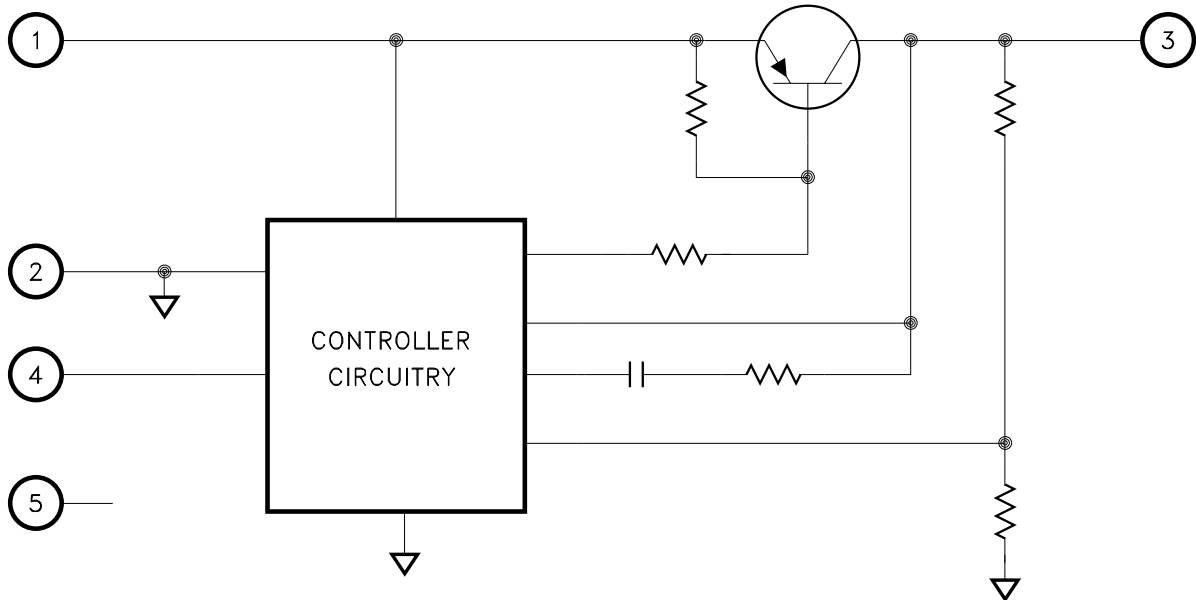
- Total Dose Hardened to 100 Krads(Si) (Method 1019.7 Condition A)
- Ultra Low Dropout for Reduced Power Consumption
- External Shutdown Function
- Latching Overload Protection
- Available in 1.5V, 1.8V, 1.9V, 2.5V, 2.8V, 3.3V and 5.0V Output Voltages
- Alternate Output Voltages Available
- Output Current Limit
- Available in 4 Lead Form Options: Straight, Up, Down and Gull Wing
- Replaces IR OMR9601 and IRUH33PXXXB/IRUH50PXXXB
- Available as SMD 5962R05220
- RAD Certified by DSCC



DESCRIPTION:

The MSK5920RH is a rad hard fixed linear regulator capable of delivering 5.0 amps of output current. Typical dropout is only 0.30 volts with a 3 amp load. An external shutdown function is ideal for power supply sequencing. This device also has internal latching overload protection. The MSK5920RH is radiation hard and specifically designed for space/satellite applications. The device is packaged in a hermetically sealed space efficient 5 pin SIP that is electrically isolated from the internal circuitry allowing for direct heat sinking.

EQUIVALENT SCHEMATIC



TYPICAL APPLICATIONS

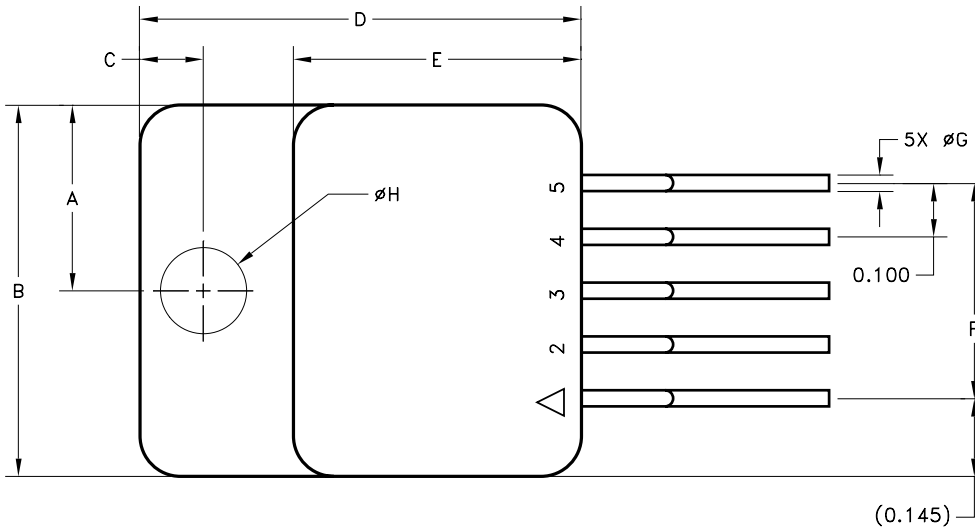
- Satellite System Power Supplies
- Switching Power Supply Post Regulators
- Constant Voltage/Current Regulators
- Microprocessor Power Supplies

PIN-OUT INFORMATION

- | | |
|---|----------|
| 1 | VIN |
| 2 | GND |
| 3 | VOUT |
| 4 | SHUTDOWN |
| 5 | N/C |

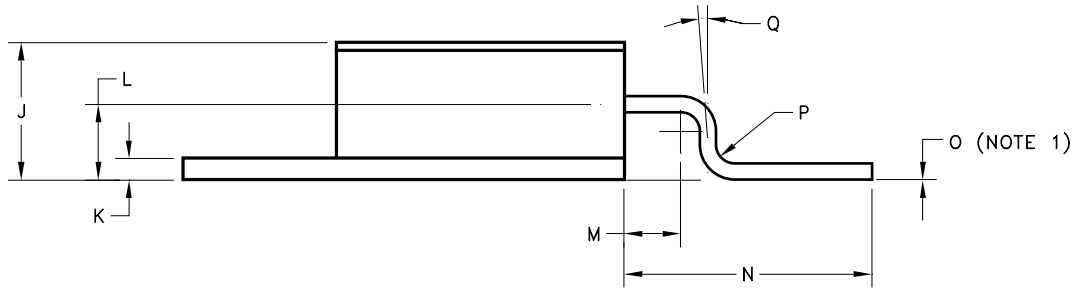
CASE = ISOLATED

MECHANICAL SPECIFICATIONS



REF	MIN	MAX
A	0.340	0.350
B	0.680	0.700
C	0.113	0.123
D	0.815	0.825
E	0.525	0.545
F	0.395	0.405
G	0.028	0.032
H	0.155	0.165
J		0.255
K	0.035	0.045
L	0.130	0.150
M	0.095	0.115
N	0.450	0.470
O	-0.010	0.010
P	0.030	0.040
Q	0°	20°

(0.145)



NOTES:

1. LEADS SHALL BE COPLANAR WITH THE PACKAGE BASE.

ESD TRIANGLE INDICATES PIN 1
WEIGHT = 7.7 GRAMS TYPICAL

ALL DIMENSIONS ARE SPECIFIED IN INCHES

ORDERING INFORMATION

MSK5920- 3.3 K RH GW

LEAD CONFIGURATIONS

GW = GULL WING

RADIATION HARDENED SCREENING

BLANK = INDUSTRIAL; H = MIL-PRF-38534 CLASS H;

K = MIL-PRF-38534 CLASS K

OUTPUT VOLTAGE

1.5 = +1.5V; 1.8 = +1.8V; 1.9 = +1.9V; 2.5 = +2.5V;

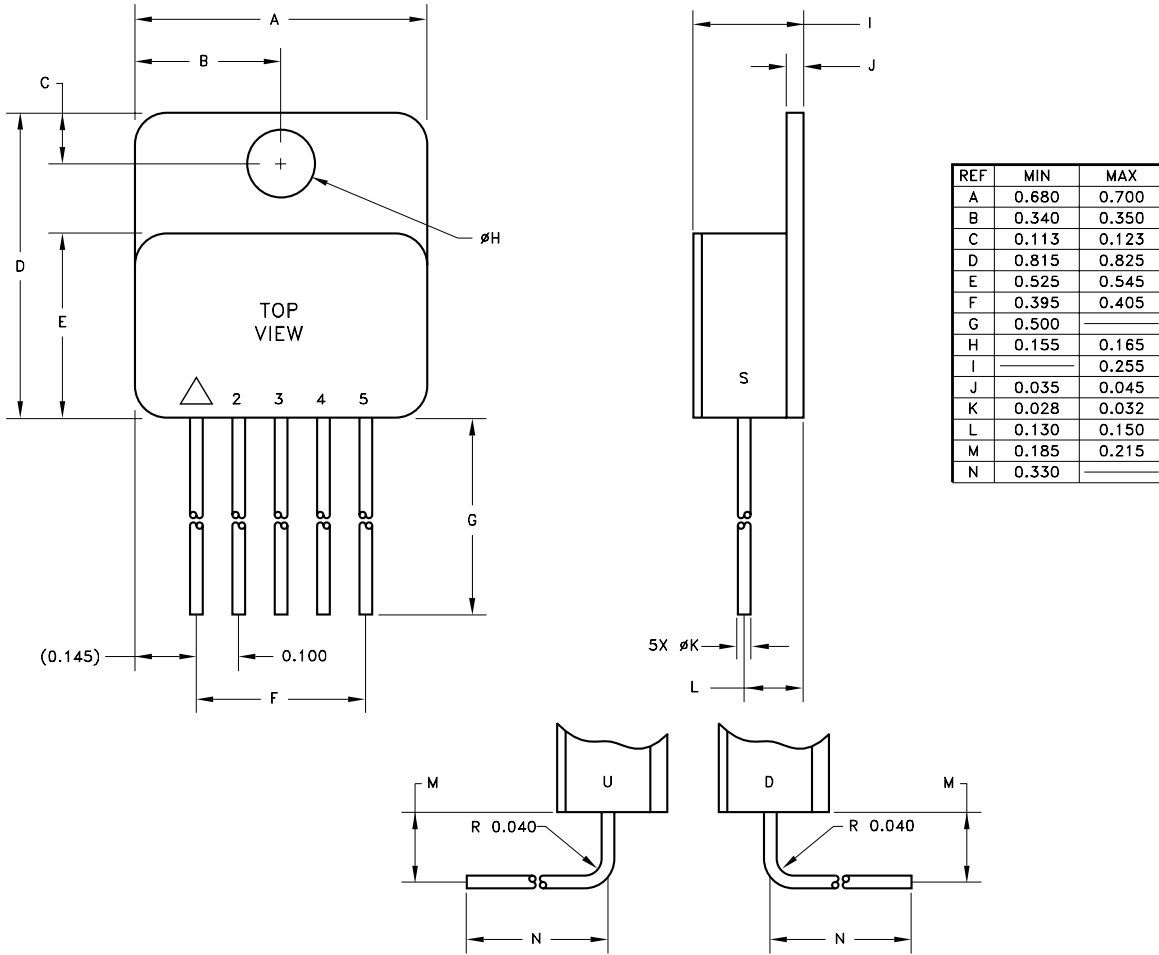
2.8 = +2.8V; 3.3 = +3.3V; 5.0 = +5.0V

GENERAL PART NUMBER

The above example is a +3.3V, Class K regulator with gull wing leads.

NOTE: See DLA SMD 5962R05220 for DLA part number options.

MECHANICAL SPECIFICATIONS CONT'D



REF	MIN	MAX
A	0.680	0.700
B	0.340	0.350
C	0.113	0.123
D	0.815	0.825
E	0.525	0.545
F	0.395	0.405
G	0.500	
H	0.155	0.165
I		0.255
J	0.035	0.045
K	0.028	0.032
L	0.130	0.150
M	0.185	0.215
N	0.330	

ESD TRIANGLE INDICATES PIN 1
WEIGHT = 7.7 GRAMS TYPICAL

ALL DIMENSIONS ARE SPECIFIED IN INCHES

ORDERING INFORMATION

MSK5920- 3.3 K RH U

LEAD CONFIGURATIONS

S = STRAIGHT; U = BENT UP; D = BENT DOWN

RADIATION HARDENED

SCREENING

BLANK = INDUSTRIAL; H = MIL-PRF-38534 CLASS H;

K = MIL-PRF-38534 CLASS K

OUTPUT VOLTAGE

1.5 = +1.5V; 1.8 = +1.8V; 1.9 = +1.9V; 2.5 = +2.5V;

2.8 = +2.8V; 3.3 = +3.3V; 5.0 = +5.0V

GENERAL PART NUMBER

The above example is a +3.3V, Class K regulator with leads bent up.

NOTE: See DLA SMD 5962R05220 for DLA part number options.

REVISION HISTORY

REV	STATUS	DATE	DESCRIPTION
R	Released	06/14	Add maximum rating for shutdown input and clarify mechanical outline.
T	Released	04/22	Remove MIL-PRF-38535, update company name and website.

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