

Allegro Part Numbering Guide

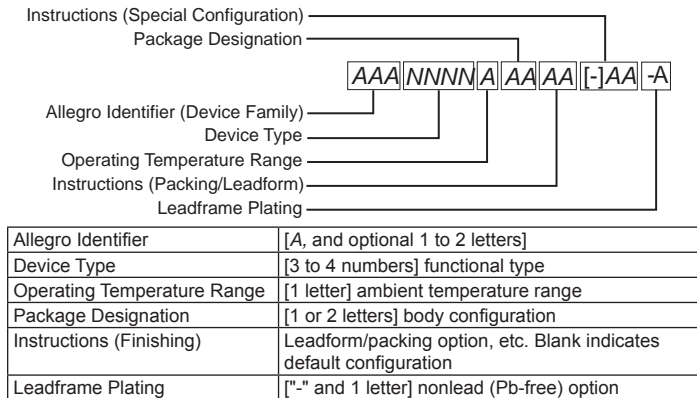
This document provides a guide to the part numbering codes used by Allegro® MicroSystems for general sales customer orders. Current individual datasheets for specific parts should be consulted before ordering. This guide should be used for reference only and is not intended to be a complete source and may be superseded by subsequent procedures. Individual part numbers may deviate from the specifications in this document. All possible combinations of device type, operating temperature range, and package style are not necessarily available.

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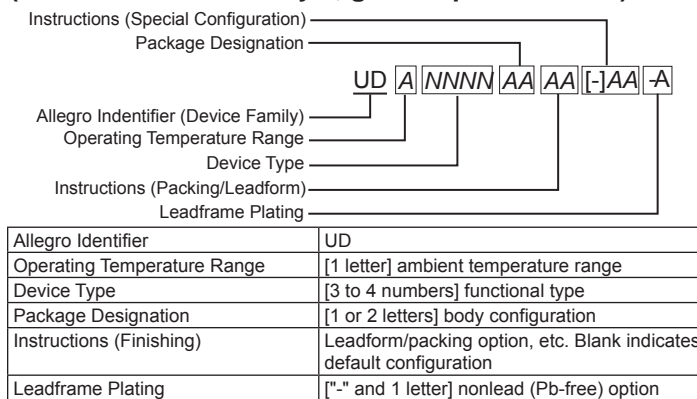
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Complete Part Numbers

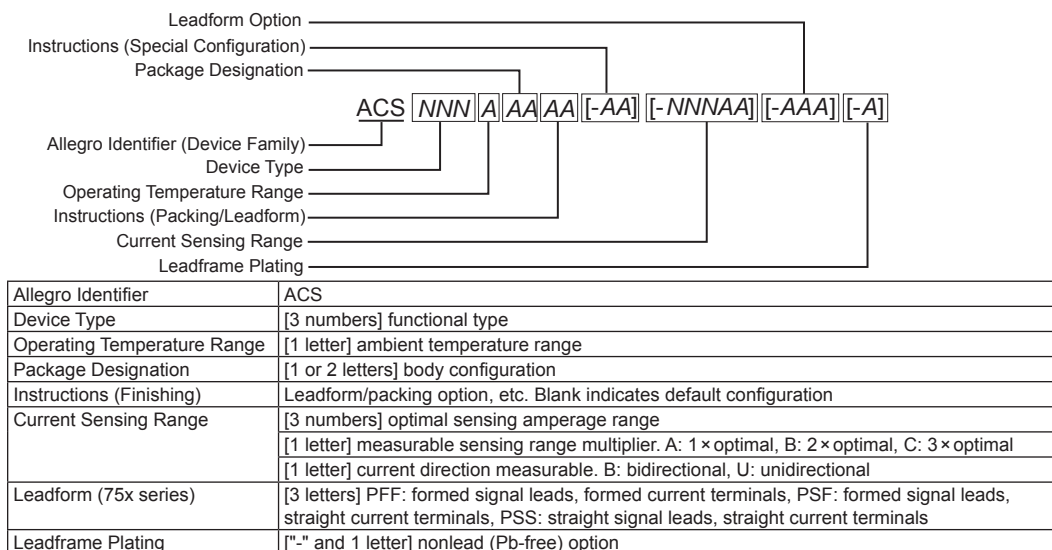
Complete Part Number Format ("A" initial character style, general product lines)



Complete Part Number Format ("U" initial character style, general product lines)



Complete Part Number Format (Sensed current range style, current sensor IC product lines)



Operating Temperature Ranges

Complete Part Number Format ("A" initial character style, general product lines)

Part Number Token	Descriptor	Operating Ambient Temperature Range
A	Commercial A	-10°C to 60°C
B	Extended Commercial B	-25°C to 75°C
C	Commercial C	0°C to 70°C
D	Commercial D	0°C to 50°C
E	Extended Automotive/Industrial E	-40°C to 85°C
F	Extended Automotive/Industrial F	-40°C to 95°C
G	Extended Industrial	-40°C to 105°C
K	Extended Industrial	-40°C to 125°C -40°C to 135°C -40°C to 150°C, when $T_J(\text{max}) \leq 150^\circ\text{C}$
L	Automotive	-40°C to 150°C
M	Extended Commercial M	-20°C to 105°C
P	Extended Automotive/Commercial P	-40°C to 160°C
S	Standard	-20°C to 85°C
X	Custom	Refer to datasheet for custom temperature range

Complete Part Number Format ("U" initial character style, general product lines)

Part Number Token	Descriptor	Operating Ambient Temperature Range
K	Extended Automotive/Industrial	-40°C to 125°C (typical)
N	Commercial/Industrial	-20°C to 85°C (typical)
Q	Automotive/Industrial	-40°C to 85°C (typical)

Package Designators

A – Dual in-line (MS-001, MS-010, MS-011)
B – Dual in-line with heatsink semi-tabs (MS-001, MS-010)
CA – Current sensor
CB – Current sensor
CG – Chip scale device
EA – Square J-leaded chip carrier with 1 side heatsink semi-tab (MS-018)
EB – Square J-leaded chip carrier with 2 sides heatsink semi-tabs (MS-018)
EC – QFN 0.40 mm contact pitch (MO-220)
ED – Square J-leaded chip carrier with 4 sides heatsink semi-tabs (MS-018)
EE – DFN 0.50 mm contact pitch (MO-229)
EF – DFN 1.27 mm contact pitch (MO-229)
EH – DFN 0.50 mm contact pitch (MO-229)
EJ – DFN 0.50 mm contact pitch (MO-229)
EK – DFN 0.95 mm contact pitch (MO-229)
EL – DFN 0.50 mm contact pitch (MO-229)
EM – DFN 0.65 mm contact pitch (MO-229)
EP – Square J-leaded chip carrier (MS-018)
EQ – Rectangular J-leaded chip carrier (MS-016)
ES – QFN 0.50 mm contact pitch (MO-220)
ET – QFN 0.50 mm contact pitch (MO-220)
EU – QFN 0.65 mm contact pitch (MO-220)
EV – QFN 0.50 mm contact pitch (MO-220)
EW – DFN 0.50 mm contact pitch (MO-229)
JP – LQFP (exposed pad) (MS-026)
JS – TQFP (exposed pad) (MS-026)
JU – TQFP (exposed pad) (MS-026)
K – Mini-SIP, four leads
KA – Mini-SIP, five leads
KB – Mini-SIP, three leads
KT – Mini-SIP, four leads, 1 mm package thickness
L – Narrow-body SOIC (MS-012)
LA – Wide-body SOIC for current sensing (MS-013)
LB – Wide-body SOIC with heat-sink semi-tabs (MS-013)
LC – Narrow-body SOIC for current sensing (MS-012)
LD – TSSOP, 0.50 mm pitch (MO-153)
LE – TSSOP, 0.65 mm pitch (MO-153)
LF – QSOP 0.635 mm pitch (MO-137)
LG – TSSOP with 2 sides heatsink semitabs (MO-153)
LH – Surface mount (SOT23W)
LJ – Narrow-body SOIC with exposed pad (MS-012)
LP – TSSOP (exposed pad), 0.65 mm pitch (MO-153)
LQ – QSOP, 0.80 mm pitch
LT – Surface mount (SOT89/TO-243AA)
LW – Wide-body SOIC (MS-013)
LY – MSOP (exposed pad) (MO-187)
LZ – MSOP (MO-187)
M – Eight-pin Dual in-line (MS-001BA)
SA – SIP, four leads, 9 mm length
SB – SIP, four leads, 7 mm length
SE – SIP, four leads
SG – SIP, four leads
SH – SIP, four leads
SJ – SIP, four leads
U – Mini-SIP, three leads
UA – Mini-SIP, three leads

Instructions (Finishing)

LC – Spread leadform
LF – Lead form per customer drawing
LT – Tape and reel TA – Tape and reel TI – Tape and reel, straight leadform
TK – Tape and reel
TL – Horizontal-mount leadform, bulk
TN – Tape and reel: SE, SG, SH, and SJ packages
TR – Tape and reel
TS – Horizontal-mount leadform, tape and reel
-In – Two-wire current level
-LN – Low on tooth
-LT – Low on tooth/TPOS
-R – Internal pull-up resistor

Leadframe Plating

B – Bismuth
P – Nickle-palladium-gold
T – 100% matte tin

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