

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
INA190A1IDCKR	ACTIVE	SC70	DCK	6	3000	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DP	Samples
INA190A1IDCKT	ACTIVE	SC70	DCK	6	250	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DP	Samples
INA190A1IDDFR	ACTIVE	SOT-23-THIN	DDF	8	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1ZGW	Samples
INA190A1IDDFT	OBSOLETE	SOT-23-THIN	DDF	8		TBD	Call TI	Call TI	-40 to 125	1ZGW	
INA190A1IRSWR	ACTIVE	UQFN	RSW	10	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AN	Samples
INA190A1IRSWT	ACTIVE	UQFN	RSW	10	250	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AN	Samples
INA190A2IDCKR	ACTIVE	SC70	DCK	6	3000	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DQ	Samples
INA190A2IDCKT	ACTIVE	SC70	DCK	6	250	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DQ	Samples
INA190A2IDDFR	ACTIVE	SOT-23-THIN	DDF	8	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1ZHW	Samples
INA190A2IDDFT	OBSOLETE	SOT-23-THIN	DDF	8		TBD	Call TI	Call TI	-40 to 125	1ZHW	
INA190A2IRSWR	ACTIVE	UQFN	RSW	10	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AM	Samples
INA190A2IRSWT	ACTIVE	UQFN	RSW	10	250	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AM	Samples
INA190A3IDCKR	ACTIVE	SC70	DCK	6	3000	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DR	Samples
INA190A3IDCKT	OBSOLETE	SC70	DCK	6		TBD	Call TI	Call TI	-40 to 125	1DR	
INA190A3IDDFR	ACTIVE	SOT-23-THIN	DDF	8	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1ZIW	Samples
INA190A3IDDFT	OBSOLETE	SOT-23-THIN	DDF	8		TBD	Call TI	Call TI	-40 to 125	1ZIW	
INA190A3IRSWR	ACTIVE	UQFN	RSW	10	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AO	Samples
INA190A3IRSWT	ACTIVE	UQFN	RSW	10	250	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AO	Samples
INA190A4IDCKR	ACTIVE	SC70	DCK	6	3000	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DS	Samples
INA190A4IDCKT	OBSOLETE	SC70	DCK	6		TBD	Call TI	Call TI	-40 to 125	1DS	
INA190A4IDDFR	ACTIVE	SOT-23-THIN	DDF	8	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1ZJW	Samples

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INA190A4IRSWR	ACTIVE	UQFN	RSW	10	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AP	Samples
INA190A4IRSWT	ACTIVE	UQFN	RSW	10	250	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AP	Samples
INA190A5IDCKR	ACTIVE	SC70	DCK	6	3000	RoHS & Green	NIPDAU SN	Level-2-260C-1 YEAR	-40 to 125	1DT	Samples
INA190A5IDCKT	OBSOLETE	SC70	DCK	6		TBD	Call TI	Call TI	-40 to 125	1DT	
INA190A5IDDFR	ACTIVE	SOT-23-THIN	DDF	8	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1ZKW	Samples
INA190A5IDDFT	OBSOLETE	SOT-23-THIN	DDF	8		TBD	Call TI	Call TI	-40 to 125	1ZKW	
INA190A5IRSWR	ACTIVE	UQFN	RSW	10	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 125	1AQ	Samples
INA190A5IRSWT	OBSOLETE	UQFN	RSW	10		TBD	Call TI	Call TI	-40 to 125	1AQ	

(1) The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

PREVIEW: Device has been announced but is not in production. Samples may or may not be available.

OBSOLETE: TI has discontinued the production of the device.

(2) **RoHS:** TI defines "RoHS" to mean semiconductor products that are compliant with the current EU RoHS requirements for all 10 RoHS substances, including the requirement that RoHS substance do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, "RoHS" products are suitable for use in specified lead-free processes. TI may reference these types of products as "Pb-Free".

RoHS Exempt: TI defines "RoHS Exempt" to mean products that contain lead but are compliant with EU RoHS pursuant to a specific EU RoHS exemption.

Green: TI defines "Green" to mean the content of Chlorine (Cl) and Bromine (Br) based flame retardants meet JS709B low halogen requirements of <=1000ppm threshold. Antimony trioxide based flame retardants must also meet the <=1000ppm threshold requirement.

(3) MSL, Peak Temp. - The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

(4) There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.

(5) Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.

(6) Lead finish/Ball material - Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

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OTHER QUALIFIED VERSIONS OF INA190 :

- Automotive : [INA190-Q1](#)
- Enhanced Product : [INA190-EP](#)

NOTE: Qualified Version Definitions:

- Automotive - Q100 devices qualified for high-reliability automotive applications targeting zero defects
- Enhanced Product - Supports Defense, Aerospace and Medical Applications