

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
REF5010AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5010 A	Samples
REF5010AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50G	Samples
REF5010AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50G	Samples
REF5010AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5010 A	Samples
REF5010ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5010	Samples
REF5010IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50G	Samples
REF5010IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50G	Samples
REF5020AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5020 A	Samples
REF5020AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50A	Samples
REF5020AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50A	Samples
REF5020AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5020 A	Samples
REF5020ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5020	Samples
REF5020IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50A	Samples
REF5020IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50A	Samples
REF5020IDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5020	Samples
REF5025AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5025 A	Samples

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
REF5025AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50B	Samples
REF5025AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50B	Samples
REF5025AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5025 A	Samples
REF5025ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5025	Samples
REF5025IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50B	Samples
REF5025IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50B	Samples
REF5025IDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5025	Samples
REF5030AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5030 A	Samples
REF5030AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50C	Samples
REF5030AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50C	Samples
REF5030AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5030 A	Samples
REF5030ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5030	Samples
REF5030IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50C	Samples
REF5030IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50C	Samples
REF5030IDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5030	Samples
REF5040AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5040 A	Samples
REF5040AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50D	Samples

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
REF5040AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50D	Samples
REF5040AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5040 A	Samples
REF5040ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5040	Samples
REF5040IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50D	Samples
REF5040IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50D	Samples
REF5040IDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5040	Samples
REF5045AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5045 A	Samples
REF5045AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50E	Samples
REF5045AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50E	Samples
REF5045AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5045 A	Samples
REF5045ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5045	Samples
REF5045IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50E	Samples
REF5045IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50E	Samples
REF5045IDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5045	Samples
REF5050AID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5050 A	Samples
REF5050AIDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50F	Samples
REF5050AIDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	R50F	Samples

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
REF5050AIDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	REF 5050 A	Samples
REF5050ID	ACTIVE	SOIC	D	8	75	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5050	Samples
REF5050IDGKR	ACTIVE	VSSOP	DGK	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50F	Samples
REF5050IDGKT	ACTIVE	VSSOP	DGK	8	250	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	R50F	Samples
REF5050IDR	ACTIVE	SOIC	D	8	2500	RoHS & Green	Call TI	Level-2-260C-1 YEAR	-40 to 125	REF 5050	Samples

(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.

OBSELETE: 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.

Important Information and Disclaimer: The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

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OTHER QUALIFIED VERSIONS OF REF5020, REF5025, REF5040, REF5050 :

- Enhanced Product : [REF5020-EP](#), [REF5025-EP](#), [REF5040-EP](#), [REF5050-EP](#)

NOTE: Qualified Version Definitions:

- Enhanced Product - Supports Defense, Aerospace and Medical Applications