

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
REF7012QDGKR	ACTIVE	VSSOP	DGK	8	3000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	2L1S	Samples
REF7012QFKHT	ACTIVE	LCCC	FKH	8	250	RoHS-Exempt & Green	Call TI	N / A for Pkg Type	-40 to 125	REF12FKH	Samples
REF7025QDGKR	ACTIVE	VSSOP	DGK	8	3000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	2TAS	Samples
REF7025QFKHT	ACTIVE	LCCC	FKH	8	250	RoHS-Exempt & Green	Call TI	N / A for Pkg Type	-40 to 125	REF25FKH	Samples
REF7030QFKHT	ACTIVE	LCCC	FKH	8	250	RoHS-Exempt & Green	Call TI	N / A for Pkg Type	-40 to 125	REF30FKH	Samples
REF7033QFKHT	ACTIVE	LCCC	FKH	8	250	RoHS-Exempt & Green	Call TI	N / A for Pkg Type	-40 to 125	REF33FKH	Samples
REF7040QDGKR	ACTIVE	VSSOP	DGK	8	3000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	2TDS	Samples
REF7040QFKHT	ACTIVE	LCCC	FKH	8	250	RoHS-Exempt & Green	Call TI	N / A for Pkg Type	-40 to 125	REF40FKH	Samples
REF7050QDGKR	ACTIVE	VSSOP	DGK	8	3000	RoHS & Green	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	2TES	Samples
REF7050QFKHT	ACTIVE	LCCC	FKH	8	250	RoHS-Exempt & Green	Call TI	N / A for Pkg Type	-40 to 125	REF50FKH	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.

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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