

PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package Pins	Package qty Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
TL4051A12IDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	TN8U
TL4051A12IDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	TN8U
TL4051A12IDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	TN8U
TL4051A12IDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	TN8U
TL4051A12QDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	TNVU
TL4051A12QDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	TNVU
TL4051A12QDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	TNVU
TL4051A12QDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	TNVU
TL4051A12QDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	9GU
TL4051A12QDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	9GU
TL4051A12QDCKRG4	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9GU
TL4051A12QDCKRG4.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9GU
TL4051AIDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN2U
TL4051AIDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN2U
TL4051AIDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN2U
TL4051AIDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN2U
TL4051AIDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	97U
TL4051AIDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	97U
TL4051AQDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	TN5U
TL4051AQDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	TN5U
TL4051AQDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9AU
TL4051AQDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9AU
TL4051B12IDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	(TN93, TN9U)
TL4051B12IDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	(TN93, TN9U)
TL4051B12IDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	(TN93, TN9U)
TL4051B12IDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	(TN93, TN9U)
TL4051B12QDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	(TNW3, TNWU)
TL4051B12QDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	(TNW3, TNWU)
TL4051B12QDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	9HU

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TL4051B12QDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	9HU
TL4051BIDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN3U
TL4051BIDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN3U
TL4051BIDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN3U
TL4051BIDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN3U
TL4051BIDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	98U
TL4051BIDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	98U
TL4051BQDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	TN6U
TL4051BQDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	TN6U
TL4051BQDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9BU
TL4051BQDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9BU
TL4051BQDCKRG4	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9BU
TL4051BQDCKRG4.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9BU
TL4051C12IDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	TNUU
TL4051C12IDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	TNUU
TL4051C12IDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	TNUU
TL4051C12IDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	TNUU
TL4051C12IDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	9FU
TL4051C12IDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 85	9FU
TL4051C12QDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	TNYU
TL4051C12QDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	TNYU
TL4051C12QDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	TNYU
TL4051C12QDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	TNYU
TL4051C12QDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU SN	Level-1-260C-UNLIM	-40 to 125	9JU
TL4051C12QDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	SN	Level-1-260C-UNLIM	-40 to 125	9JU
TL4051CIDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN4U
TL4051CIDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN4U
TL4051CIDBZT	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN4U
TL4051CIDBZT.A	Active	Production	SOT-23 (DBZ) 3	250 SMALL T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	TN4U
TL4051CIDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	99U
TL4051CIDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 85	99U

Orderable part number	Status (1)	Material type (2)	Package Pins	Package qty Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
TL4051CQDBZR	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	TN7U
TL4051CQDBZR.A	Active	Production	SOT-23 (DBZ) 3	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	TN7U
TL4051CQDCKR	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9CU
TL4051CQDCKR.A	Active	Production	SC70 (DCK) 5	3000 LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-40 to 125	9CU

⁽¹⁾ **Status:** For more details on status, see our [product life cycle](#).

⁽²⁾ **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

⁽³⁾ **RoHS values:** Yes, No, RoHS Exempt. See the [TI RoHS Statement](#) for additional information and value definition.

⁽⁴⁾ **Lead finish/Ball material:** Parts 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.

⁽⁵⁾ **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

⁽⁶⁾ **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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