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)
TL1963A-15DCQR	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-15
TL1963A-15DCQR.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-15
TL1963A-15DCQT	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-15
TL1963A-15DCQT.A	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-15
TL1963A-15DCYR	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TF
TL1963A-15DCYR.A	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TF
TL1963A-15DCYT	Active	Production	SOT-223 (DCY) | 4	250 | SMALL T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TF
TL1963A-15DCYT.A	Active	Production	SOT-223 (DCY) | 4	250 | SMALL T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TF
TL1963A-15KTTR	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-15
TL1963A-15KTTR.A	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-15
TL1963A-18DCQR	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-18
TL1963A-18DCQR.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-18
TL1963A-18DCQT	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-18
TL1963A-18DCQT.A	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-18
TL1963A-18DCYR	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TG
TL1963A-18DCYR.A	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TG
TL1963A-18KTTR	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-18
TL1963A-18KTTR.A	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-18
TL1963A-25DCQR	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-25
TL1963A-25DCQR.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-25
TL1963A-25DCQT	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-25
TL1963A-25DCQT.A	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-25
TL1963A-25DCYR	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TH
TL1963A-25DCYR.A	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TH
TL1963A-25DCYT	Active	Production	SOT-223 (DCY) | 4	250 | SMALL T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TH
TL1963A-25DCYT.A	Active	Production	SOT-223 (DCY) | 4	250 | SMALL T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TH

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)
TL1963A-25KTTR	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-25
TL1963A-25KTTR.A	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-25
TL1963A-33DCQR	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-33
TL1963A-33DCQR.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-33
TL1963A-33DCQRG4	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-33
TL1963A-33DCQRG4.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-33
TL1963A-33DCQT	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-33
TL1963A-33DCQT.A	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	1963A-33
TL1963A-33DCYR	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TJ
TL1963A-33DCYR.A	Active	Production	SOT-223 (DCY) | 4	2500 | LARGE T&R	Yes	SN	Level-2-260C-1 YEAR	-40 to 125	TJ
TL1963A-33KTTR	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-33
TL1963A-33KTTR.A	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A-33
TL1963ADCQR	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	TL1963A
TL1963ADCQR.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	TL1963A
TL1963ADCQRG4	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	TL1963A
TL1963ADCQRG4.A	Active	Production	SOT-223 (DCQ) | 6	2500 | LARGE T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	TL1963A
TL1963ADCQT	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	TL1963A
TL1963ADCQT.A	Active	Production	SOT-223 (DCQ) | 6	250 | SMALL T&R	Yes	NIPDAU	Level-2-260C-1 YEAR	-40 to 125	TL1963A
TL1963AKTTR	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A
TL1963AKTTR.A	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A
TL1963AKTTRG3	Active	Production	DDPAK/ TO-263 (KTT) | 5	500 | LARGE T&R	Yes	SN	Level-3-245C-168 HR	-40 to 125	TL1963A

(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.

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.

In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

OTHER QUALIFIED VERSIONS OF TL1963A :

- Automotive : TL1963A-Q1

NOTE: Qualified Version Definitions:

- Automotive - Q100 devices qualified for high-reliability automotive applications targeting zero defects