

PRODUCT PROFILE & CROSS-REFERENCE

NIC Technical Support: tpmg@niccomp.com

PDF Specification: <https://www.niccomp.com/products/catalog/nspe-tj.pdf>

Product Category:

Passives; Capacitor; Aluminum Electrolytic; SMT; Hybrid; AEC-Q200; +125°C

NSPE-TJ series

Hybrid Construction SMT Aluminum Electrolytic Capacitors

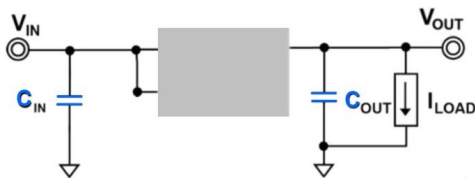


NIC Components Corp. is pleased to announce the release of the NSPE-TJ series of surface mount hybrid construction SMT aluminum electrolytic capacitors featuring extended 4000-hour load life ratings at +125°C (i.e., 16,000 hours at +105°C, and 64,000 hours at +85°C). NSPE-TJ has an operating temperature range of -55°C to +125°C, meets AEC-Q200, and is available in five sizes; 6.3x6.1 to 10x12.5 (∅DxH) covering capacitance values from 22uF to 470uF in voltage ratings from 25VDC to 80VDC.

Hybrid construction (polymer and liquid electrolyte) provides superior performance supporting 5G cellular remote radio head (RRH), and higher voltage systems; 48VDC automotive, 57V IIoT, and -48VDC /-60VDC power for fixed and mobile telecommunication and datacom (ICT) network equipment. NSPE-TJ supports higher current ratings from 1.4A to 3.8A (≤ 200% increase) in the same CV-Sizes as compared to the legacy NSPE-TF series (see table below).

Features:

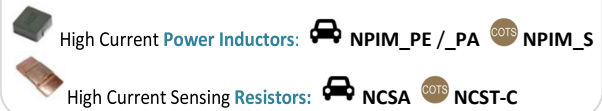
- High Reliability - Long Life: 16Khrs @ +105°C
- Low ESR & High Ripple Current (3.8A) At 100Khz
- Auto Grade: meets **AEC-Q200**
- Automatic Mounting, and Reflow Soldering
- DC-DC Converter and Regulator Applications
- Available With Wide Anti-Vibration Terminations



Applications:

- Enterprise-Level
- Cellular – Network Infrastructure
- DC-DC Power Circuits
- Power Control
- Point of Load Regulators

Co-Sell Products:



Upgrade from **NSPE-TF** to **NSPE-TJ**:
up to 2X increase in ripple current rating (RCR)

WVDC	Size	Cap	100KHz Ripple Current Rating (+125°C)	
			NSPE-TF	NSPE-TJ
50V	∅8×10.5	68uF	1250mA	→ 2400mA
	∅10×10.5	120uF	1600mA	→ 3000mA
	∅10×12.5	150uF	1820mA	→ 3500mA

WVDC	Size	Cap	100KHz Ripple Current Rating (+125°C)	
			NSPE-TF	NSPE-TJ
63V	∅8×10.5	47uF	1100mA	→ 2100mA
	∅10×10.5	82uF	1400mA	→ 2600mA
	∅10×12.5	100uF	1650mA	→ 3200mA

WVDC	Size	Cap	100KHz Ripple Current Rating (+125°C)	
			NSPE-TF	NSPE-TJ
80V	∅8×10.5	22uF	1030mA	→ 1800mA
	∅10×10.5	33uF	1270mA	→ 2000mA
	∅10×12.5	39uF	1360mA	→ 2400mA

Cross-Reference

NIC	AVX	Nichicon	Nippon Chemi-Con United Chemi-Con	Panasonic
NSPE-TJ	AHC	GYA GYE	HXJ	EEHAZA ZA-A

NIC Components Corp.

ISO 9001:2015 REGISTERED