



New Low Noise pHEMTs by CEL


Lower Cost Drop-In Replacements to Renesas Devices

OVERVIEW

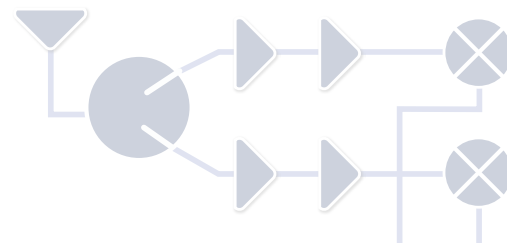
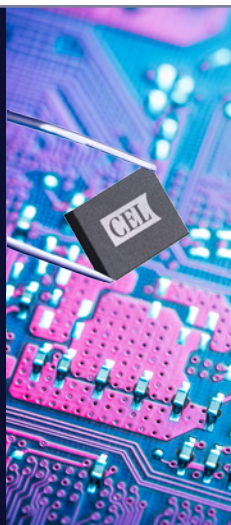
CEL is offering a new family of Ku and K bands low noise RF GaAs FETs.

Drop-in Replacements

CEL offers drop-In alternatives to discontinued Renesas Electronics RF products with cost savings to customers.

Look for this icon  next to any Renesas discontinued part number for its CEL equivalent drop-in replacement.

Visit: www.cel.com/RF for the latest information as we continue to release new products.



BENEFITS & FEATURES



Lower Cost

Cost Savings for New and Existing Customers



Drop-In Replacements

Replace your Renesas Phased-Out Devices with CEL's RF Parts



High RF Performance







Better RF Performance than other pHEMTs



High Japanese Quality

Manufactured in Japan with High Quality, Packaging and Testing

GaAs FETs

CEL Part Numbers	Test Frequency (GHz)	NF/GA Bias		NF (dB)	GA (dB)	IDSS (mA)	 Drop-in Replacement to Renesas	Package Type
		VDS (V)	IDS (mA)					
CE3512K2	12	2.0	10	0.30	13.7	47	NE3210S01 NE3511S02 NE3512S02 NE3516S02 NE4210S01	 (2.6 x 2.6 x 1.5)
CE3514M4	12	2.0	10	0.42	12.2	47.5	NE3503M04 NE3513M04	 (2.0 x 1.25 x 0.6)
CE3520K3	20	2.0	10	0.55	13.8	40	NE3514S02 NE3517S03 NE3520S03	 (2.6 x 2.6 x 1.5)
CE3521M4	20	2.0	10	0.70	11.9	40	NE3521M04	 (2.0 x 1.25 x 0.6)
CE3524K3	24	2.0	10	0.84	13.4	40		 (2.6 x 2.6 x 1.5)

New Low Noise pHEMTs by CEL



BLOCK DIAGRAM EXAMPLES

LNBS for 12 GHz



LNBS for 20 GHz



TARGET MARKETS



DBS/LNB
Digital Broadcast Systems and
Low Noise Block downconverters



VSAT Systems
Very Small Aperture Terminal
Satellite communication systems



Microwave Systems
General RF
Communication Systems

AVAILABLE TOOLS & DOCUMENTATION

- Datasheets
- S-Parameters

Available on CEL's website (on the product page of each device)

Get Full Access of Tools & Documents at:
www.cel.com/RF

