



Recovery rectifiers

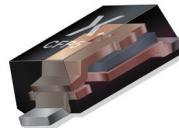
Hyperfast recovery, space-saving devices

Nexperia's recovery rectifiers deliver high power density while minimizing reverse recovery time and loss. For efficient switching and power conversion applications in automotive, industrial and consumer markets.

Portfolio

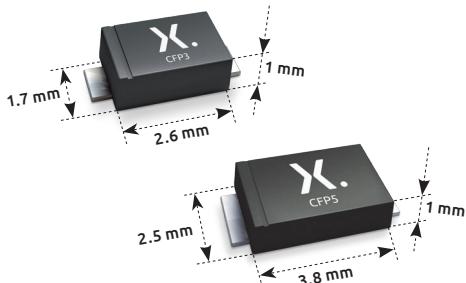
- 200 V **Hyperfast** switching parts with optimized recovery time (trr) of < 25 ns
- High-speed switching capability
- Low voltage drop (VF @ $I_{F\max}$ ~ 1 V)
- Low leakage current, also at high temperature
- AEC-Q101 qualified parts (175 °C $T_{J\max}$)

Robust & thermally efficient



- High current pulse capability due to solid copper clip-bond
- High power density / high efficiency planar technology
- Low magnetic inductance optimizes switching behavior

Economical use of space



- Just 1 mm package height for thin PCB designs
- More than 50% footprint savings – CFP3 compared to SMA

Key applications

- Polarity protection
- DC/DC conversion
- AC/DC conversion
- Freewheeling of inductive load
- Standard switching application
- High-speed switching application

nexperia

Recovery rectifiers - Automotive qualified

V _R max (V)	V _F max (V)	(@) I _F (A)	I _R max (µA)	(@) V _R (V)	trr max (ns)	Package	CFP5 (SOD128)	CFP3 (SOD123W)
							Size (mm)	3.8 x 2.5 x 1.0
							P _{tot} (mW) @ 1cm ²	1050
200	0.93	1	0.2	200	25	 bra036		PNE20010ER
	0.98	2	0.2	200	25			PNE20020ER
	0.95	2	0.2	200	25		PNE20020EP	
	0.98	3	0.2	200	30		PNE20030EP	
400	1.1	1	1	400	1800			PNS40010ER

Types in **bold** represent new products

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