

STANDARD LINEAR PRODUCTS

Industry Standard Product Range

The breadth of Diodes' standard linear portfolio provides designers with cost-effective industry standard replacements to high performance devices for the most demanding consumer and industrial applications.

Many of the most popular parts feature industry standard part numbers and specifications with standard prefixes such as LMxx and TLxx. APX and ZX parts offer comparable specifications where the more familiar standard part numbers are not yet available.

The following highlights our most popular current industry standard parts:

Timer Devices

- Industry standard parts for general purpose timing applications
- Specification match and pin for pin compatible with competitive parts
- Suitable for consumer and industrial applications

Timer Devices

NE555	Timer device in SO8 package. 0 to 70°C operating temperature range (NEW)
SA555	Timer device in SO8 package. -40 to 85°C operating temperature range (NEW)
NA555	Timer device in SO8 package. -40 to 105°C operating temperature range (NEW)

Op-amps and Comparators

- Industry standard parts for general purpose applications.
- Specification match and pin for pin compatible with competitive parts
- Suitable for consumer and industrial applications.
- Industry standard drop-in devices.

Op-amps and Comparators

LM358	Low power industry standard dual op-amp
LMV321	Single low voltage op-amp in 5-Pin SOT353/SOT25 packages
LMV358	Dual low voltage op-amp in MSOP8 and SO8 packages
LMV324	Quad low voltage op-amp in TSSOP14 and SO14 packages
APX4558	Dual low noise op-amps in SO8 package
TL072	Low power, low noise dual op-amps in SO8 package
TL082	Low power, low noise dual op-amps in SO8 package
APX393	Dual low voltage comparator in SO8 package
APX339	Quad low voltage comparator in TSSOP14 package

Shunt Regulators

- Cost-effective solutions to a variety of consumer, power supply, industrial, and automotive applications.
- Wide temperature ranges: -40 to 125°C
- Minimum cathode current: 65µA
- 0.5% and 1% variants in all package options
- Addresses a wide variety of system needs.

Shunt Regulators

TL431	2.495V 0.5% and 1% regulators in SOT23 and SOT25 packages
TL432	2.495V 0.5% and 1% regulators with alternative pinout in SOT23
TLV431	1.24V 0.5% and 1% regulators in SC70-6, SOT23 and SOT25 packages
ZXRE250	2.495V 0.5% and 1% very low power regulators in SOT23



Voltage References

- Industry standard pin out devices
- Shunt references providing excellent temperature stability.
- 0.5% and 1% tolerance options
- Suitable for portable and battery powered applications.
- Space saving surface mount packages

Voltage References

LM4040/1	High accuracy voltage references in SC70-5 and SOT23 packages
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Microprocessor Reset Devices

- Monitors 2.5, 3.0, 3.3 and 5V power supplies
- Threshold voltage chosen to meet the needs of the system
- No external components required
- Improves circuit reliability
- Reduces PCB area and cost

Microprocessor Reset Devices

APX803	Active low open drain output devices with a range of threshold voltages available in SOT23 package
APX809	Active low push pull output devices with a range of threshold voltages available in SOT23 package
APX810	Active high push pull output devices with a range of threshold voltages available in SOT23 package

Cross Reference List

The following provides a simple guide to switching Diodes parts for major industry standard competitors:

Timer Devices

Diodes	Package	TI/NSC	STM	Fairchild	NXP
NE555	SO8	NE555 LM555	NE555	LM555 NE555 KA555	NE555
SA555	SO8	SA555		SA555 KA555	SA555
NA555	SO8	NA555	SA555		

Op-amps and Comparators

Diodes	Package	TI/NSC	STM	Fairchild	On-Semi
LM358	SO8	LM358	LM358	LM358	LM358
LMV321	SOT353 SOT25	LMV321	LMV321	LMV321	LMV321
LMV324	SO14 TSSOP14	LMV324	LMV324	LMV324	LMV324
LMV358	SO8 MSOP8	LMV358	LMV358	LMV358	LMV358
APX4558	SO8	RC4558	MC4558	KA4558	
TL072	SO8	TL072	TL072		
TL082	SO8	TL082	TL082		
APX339	TSSOP14	LMV339			LMV339
APX393	SO8 MSOP8	LMV393			LMV393

Shunt Regulators

Diodes	Package	TI/NSC	STM	Fairchild	Microsemi	On-Semi	Semtech
TL431	SOT23 SOT25	TL431 LM431	TL431	TL431 KA431 LM431	TL431	TL431	SC431
TL432	SOT23	TL432 LM432	TL432		TL432	TL432	
TLV431	SOT23 SOT363 SOT25	TLV431 LMV431				TLV431	

Voltage References

Diodes	Package	TI/NSC	STM	Maxim	Micrel
LM4040/1	SOT23 SOT353	LM4040/1	LM4040/1	LM4040/1	LM4040/1

Microprocessor Reset Devices

Diodes	Package	Maxim	AD	On-Semi	Micrel	Microchip	STM	TI/NSC
APX803	SOT23	MAX803	ADM803	MAX803 NCP803 CAT803				
APX809	SOT23	MAX809	ADM809	CAT809 MAX809	MIC809	TCM809 MCP809	STM809	TPS3809 LM809 MCP809
APX810	SOT23	MAX810	ADM810	CAT810 MAX810	MIC810	TCM810 MCP810	STM810	TPS3810 LM810 MCP810

