

# Small-signal Discretes



## Small-signal diodes

Product category	Key facts	SMD											Glass	NXP type names	
		SOD128/123W (FlatPower)	SOD123F/323 & SOD323F/523 (Standard 2 pin)	SOD882(D) & SOT883/886/891	SOT96/89/223	SOT457 (SC-74)	SOT23	SOT143B	SOT1061 (Leadless 2 x 2 mm)	SOT323/353/363	SOT416 (SC-75)	SOT663/665/666	SOD27/66/68 (Axial lead)		SOD80C (MiniMelf)
General purpose Schottky diodes	0.07 - 0.25 A, 30 - 100 V, single, dual, triple and quad configuration; 12 package options		•	•			•	•		•	•	•	•	•	BAS*, BAT*, 1PS*, RB*, PMBD*
Medium power Schottky rectifier	0.2 - 5 A, 10 - 60 V, single and dual configuration, low $V_f$ and low $I_{r}$ ; 14 package options	•	•	•	•	•	•		•	•	•				PMEG*
Zener diodes	2.4 - 100 V, EU and Jap. spec available; 11 package options		•	•	•		•		•		•	•	•	•	BZV*, BZX*, BZB*, BZT*, NZH*, NZX*, PDZ*, PZU*,...
Switching diodes	0.1 A, 50 - 300 V, standard, controlled avalanche and low leakage current versions; 13 package options		•	•		•	•	•		•	•	•	•	•	1N4148, BAS*, BAV*, BAW*, BAL*



FlatPower SOD123W/128



## Protection and signal conditioning devices

Product category	Key facts	SMD						NXP type names
		TSSOP*/SSOP* (Multi pin)	SOT23/3x3/457 (Standard)	SOD123F/323 & SOD323F/523 (Standard 2 pin)	SOD128/123W (FlatPower)	QFN (Quad, Flat, No leads) 2 - 16 pins down to 0603 [mm] SOD882(D)/SOT883/XSON/etc.		
ESD protection diodes	6 capacitance classes down to $C_{it} = 0.4$ pF, single and multichannel, uni- and bidirectional, up to 30 kV ESD level; >20 package options	•	•	•		•		PESD*, BZA*, PRTR*, NUP*, IP42*, IP40*, IP43*
ESD protection & EMI filtering	RC and LC filtering, 1-,2-,4-,6-,8- and 10-channels; >20 package options	•	•			•		IP42*, IP40*, IP43*, PEMI*
ESD protection & signal conditioning	ESD protection combined e.g. with level shifting, buffering, pull up resistors; 16 package options	•	•	•		•		IP47*, IP48*
TVS diodes	24/ 40/ 400/ 600 W for 10/1000 $\mu$ s pulse, $V_{BR} < 74$ V; 3 package options		•		•			PTVS*, MMBZ*



Leadless SOD882D with solderable sidepads

\*For detailed information visit [www.standardproducts.nxp.com](http://www.standardproducts.nxp.com) or download the selection guide at [www.nxp.com/discrete\\_selection\\_guide](http://www.nxp.com/discrete_selection_guide)



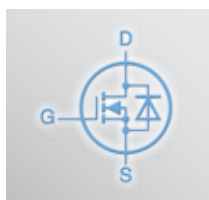


## Bipolar transistors

Product category	Key facts	SMD					NXP type names
		SOT96 (SO-8)	SOT223/SOT89 (Medium power)	SOT23/3x3/457 (Standard 3 & 6 pin)	SOT883/416/666 (Ultra small)	SOT1061/1118 (Leadless 2 x 2 mm)	
General purpose bipolar transistors	0.1 - 1 A, 12 - 100 V, $P_{tot}$ up to 2 W, switching, high voltage and medium-power transistors, matched pairs, MOSFET drivers; 12 package options		•	•	•		BC*, PMBT*, PZT*, PMD*
Low $V_{CEsat}$ (BISS) transistors	0.5 - 8 A, $\leq 100$ V, single, double configurations; 12 package options	•	•	•	•	•	PBSS*,...
High voltage transistors	150 - 500 V, 0.1 - 2 A; 5 package options		•	•		•	BF*, PBHV*, PMBTA*
Resistor-equipped transistors	0.1 - 0.6 A, $\leq 50$ V; 7 package options			•	•		PDT*, PEM*, PUM*, PBR*

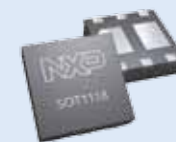


Leadless 2 x 2 mm SOT1061



## MOSFETs

Product category	Key facts	SMD				NXP type names
		SOT223/SOT89 (Medium power)	SOT23/3x3/457 (Standard 3 & 6 pin)	SOT883/416/666 (Ultra small)	SOT1118 (Leadless 2 x 2 & 3 x 3 mm)	
Small-signal MOSFETs	12 - 300 V, single and dual, N- and P-channel versions, low $R_{DSon}$ , ESD protected; 9 package options	•	•	•	•	PM*, 2N7002*, BS*, PH*, Si*, NX*



Leadless 2 x 2 mm SOT1118



## Standard & advanced linear products

Product category	Key facts	SMD			NXP type names
		SOT23	SOT223	SOT886/SOT1194 WLCSP	
Adjustable shunt voltage regulator IC	$V_{ref}$ 1.24 and 2.495 V, $V_{KA}$ max = 20 and 36 V	•			TLVH431*, TL431*
Low-dropout voltage regulators (LDO)	Adjustable and fixed output voltage 1.2 - 12 V, 1 A, $V_m$ = max 20 V		•		NX1117*
	150 & 200 mA, 60 mV @ 200 mA dropout voltage; low noise; 3 package options			•	LD68*



SOT1194

\*For detailed information visit [www.standardproducts.nxp.com](http://www.standardproducts.nxp.com) or download the selection guide at [www.nxp.com/discrete\\_selection\\_guide](http://www.nxp.com/discrete_selection_guide)