



**National  
Semiconductor**

**Surface Mount Diodes**

**General Purpose & Specialty Diodes**

PLASTIC PACKAGE

Device	Description	Pkg. No.	Pin Out	Bv (V) Min	I <sub>R</sub> (mA) @ Max	V <sub>R</sub> V	V <sub>F</sub> (V) @ Max	I <sub>F</sub> mA	C pF Max	t <sub>rr</sub> ns Max	Test Cond.	Proc. Family
<b>FDSO 1000 FAMILY</b>												
BAS16	Single	TO-236	(1)	75	1000	75	0.715 0.855	1.0 10.0	2.0	6.0	(Note 1)	D4
BAV70	Common Cathode	TO-236	(4)	70	5000	70	1.1 1.3	50.0 100.0	1.5	6.0	(Note 2)	D4
BAV74	Common Cathode	TO-236	(4)	50	100	50	1.0	100	2.0	4.0	(Note 3)	D4
BAV99	Series	TO-236	(3)	70	2500	70	See BAS 16		1.5	6.0	(Note 4)	D4
BAW56	Common Anode	TO-236	(5)	70	2500	70	See BAS 16		2.5	6.0	(Note 4)	D4
FDSO 914	Single	TO-236	(1)	100	25	20	1.0	10	4.0	4.0	(Note 5)	D4
FDSO 4148	Single	TO-236	(1)	100	25	20	1.0	10	4.0	4.0	(Note 5)	D4
FDSO 4448	Single	TO-236	(1)	100	25	20	1.0	100	2.0	4.0	(Note 5)	D4
<b>FSDO 1200 FAMILY</b>												
FSDO 1201	Single	TO-236	(1)	100	25	20	1.0	100	2.0	4.0		D4
FSDO 1202	Single	TO-236	(2)	100	25	20	1.0	100	2.0	4.0		D4
FSDO 1203	Series	TO-236	(3)	100	25	20	1.0	100	2.0	4.0		D4
FSDO 1204	Common Cathode	TO-236	(4)	100	25	20	1.0	100	2.0	4.0		D4
FSDO 1205	Common Anode	TO-236	(5)	100	25	20	1.0	100	2.0	4.0		D4

**TEST CONDITIONS:**

Note 1: I<sub>F</sub> = I<sub>R</sub> = 10 mA, R<sub>L</sub> = 100Ω.

Note 2: I<sub>F</sub> = I<sub>R</sub> = 10 mA, V<sub>R</sub> = 5.0V, I<sub>R</sub> (REC) = 1.0 mA, I<sub>F</sub> (REC) = 1.0 mA.

Note 3: I<sub>F</sub> = I<sub>R</sub> = 10 μA, R<sub>L</sub> = 100Ω, I<sub>R</sub> (REC) = 1.0 μA measured at I<sub>R</sub> = 1.0 mA.

Note 4: I<sub>F</sub> = I<sub>R</sub> = 10 mA, V<sub>R</sub> = 6V, R<sub>L</sub> = 100Ω Rec @ 1.0 mA.

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Surface Mount Devices



# Surface Mount Diodes

## General Purpose & Specialty Diodes (Continued)

PLASTIC PACKAGE

Device	Description	Pkg. No.	Pin Out	Bv (V) Min	I <sub>r</sub> (nA) Max	V <sub>r</sub> (V)	V <sub>f</sub> (V) @ I <sub>f</sub> mA Max	C pF Max	t <sub>rr</sub> ns Max	Test Cond.	Proc. Family
<b>FDSO 1300 FAMILY</b>											
FDSO 1301	Single	TO-236	(1)	30	Consult Factory	1.1	50				D6
<b>FDSO 1400 FAMILY</b>											
FDSO 1401	Single	TO-236	(1)	200	100	175	200	2.0	50		D1
FDSO 1402	Single	TO-236	(2)	200	100	175	200	2.0	50		D1
FDSO 1403	Series	TO-236	(3)	200	100	175	200	2.0	50		D1
FDSO 1404	Common Cathode	TO-236	(4)	200	100	175	200	2.0	50		D1
FDSO 1405	Common Anode	TO-236	(5)	200	100	175	200	2.0	50		D1
FDSO 3070	Single	TO-236		200	100	175	100	5.0	50	(Note 2)	D2
<b>FDSO 1500 FAMILY</b>											
FDSO 1501	Single	TO-236	(1)	200	1.0	125	200	4.0			D2
FDSO 1502	Single	TO-236	(2)	200	1.0	125	200	4.0			D2
FDSO 1503	Series	TO-236	(3)	200	1.0	125	200	4.0			D2
FDSO 1504	Common Cathode	TO-236	(4)	200	1.0	125	200	4.0			D2
FDSO 1505	Common Anode	TO-236	(5)	200	1.0	125	200	4.0			D2
FDSO 3595	Single	TO-236		150	1.0	125	200	8.0		See 1N6099	D2

**TEST CONDITIONS:**

Note 1: I<sub>f</sub> = I<sub>r</sub> = 30 mA, R<sub>L</sub> = 100Ω  
 Note 2: I<sub>f</sub> = I<sub>r</sub> = 30 mA, R<sub>L</sub> = 100Ω

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General Purpose Diodes & Specialty Diodes (Continued)

PLASTIC PACKAGE

Device	Description	Pkg. No.	Pin Out	Bv (V) Min	I <sub>R</sub> (nA) Max	V <sub>R</sub> V	V <sub>F</sub> (V) Max	I <sub>F</sub> mA	C pF Max	t <sub>rr</sub> ns Max	Test Cond.	Proc. Family
<b>FDSO 1700 FAMILY</b>												
FDSO 1701	Single	TO-236	(1)	30	50	20	1.1	50	1.0	0.7		D3
FDSO 1702	Single	TO-236	(2)	30	50	20	1.1	50	1.0	0.7		D3
FDSO 1703	Series	TO-236	(3)	30	50	20	1.1	50	1.0	0.7		D3
FDSO 1704	Common Cathode	TO-236	(4)	30	50	20	1.1	50	1.0	0.7		D3
FDSO 1705	Common Anode	TO-236	(5)	30	50	20	1.1	50	1.0	0.7		D3

TEST CONDITIONS:

Note 1: I<sub>F</sub> = I<sub>R</sub> = 10 mA, R<sub>L</sub> = 100Ω

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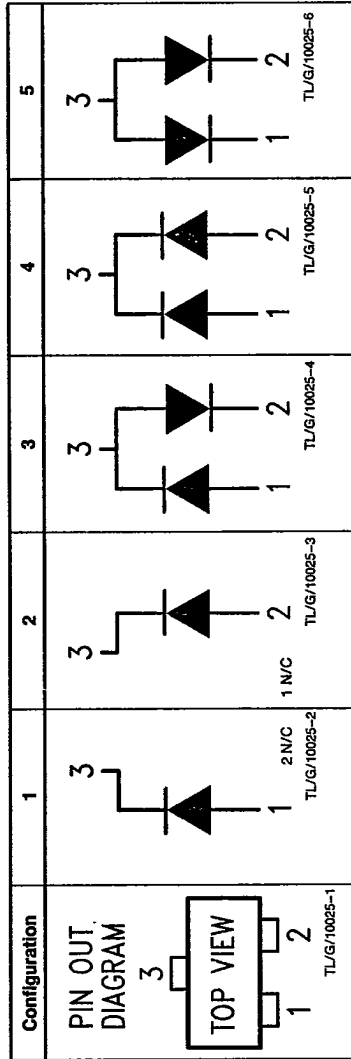
Surface Mount Devices

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**General Purpose Diodes & Specialty Diodes (Continued)**

The National "FDSO" Series provides the SOT-23 electrical equivalent of the standard devices listed. Each family is available in 5 configurations.

FDSO1200 FAMILY	FDSO1400 FAMILY	FDSO1500 FAMILY	FDSO1700 FAMILY
1N914 1N914A 1N914B 1N916 1N916A 1N916B 1N3064 1N3600 1N4009 1N4148	FDH600 FDH666	1N625 1N626 1N627 1N628 1N629 1N658 1N660 1N3070 1S920 1S921	1N463A 1N482B 1N483B 1N484B 1N485B 1N3595 1N6099 FDH300 FDH333
1N4149 1N4150 1N4151 1N4154 1N4305 1N4446 1N4448 1N4449 1N4450 1N4455	1S922 1S923 FDH400 FDH444	1N456 1N456A 1N457 1N457A 1N458 1N458A 1N459 1N459A 1N461A 1N462A	1N4244 1N4376 FDH700



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