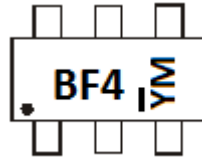


## Marking Information



BF4= Product Type Marking Code  
 YM = Date Code Marking  
 Y = Year (ex: D = 2016)  
 M = Month (ex: 9 = September)  
 Note: "—" represents internal code

### Date Code Key

Year Code	2015	2016	2017	2018	2019	2020
	C	D	E	F	G	H

Month Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	2	3	4	5	6	7	8	9	O	N	D

## Maximum Ratings (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Value	Unit
Operating Supply Voltage (V <sub>P</sub> )	6	V
Diode Forward Current (A <sub>OUT</sub> /B <sub>OUT</sub> Side)	8	mA
Continuous Current through Signal Pins (IN to OUT) 1,000 hours	125	mA
ESD Protection – Contact Discharge (Note5)	±12	kV
	±4	kV

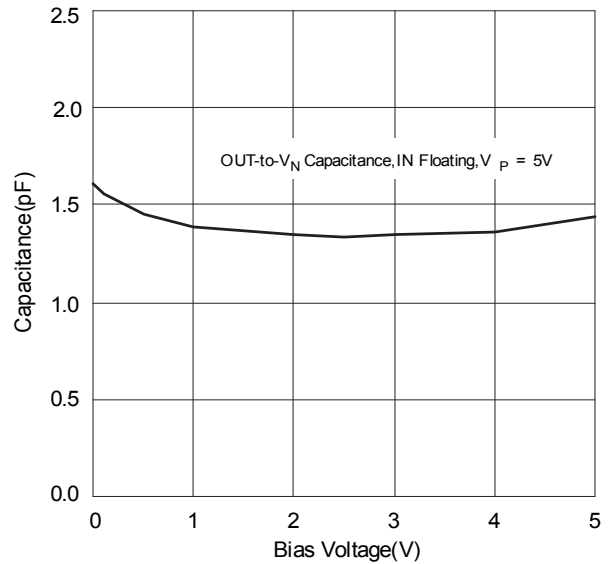
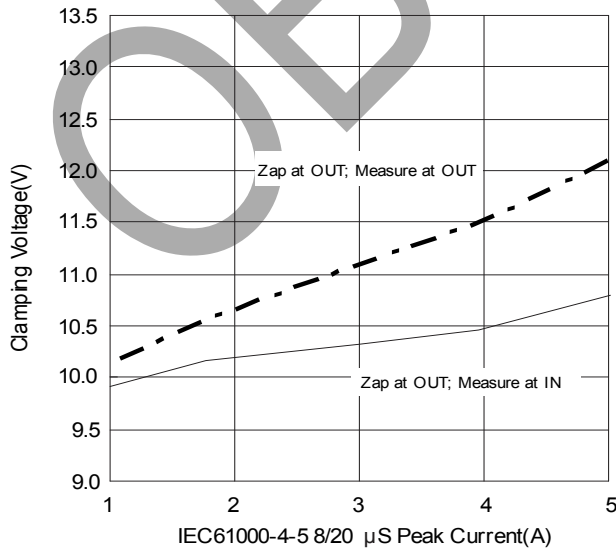
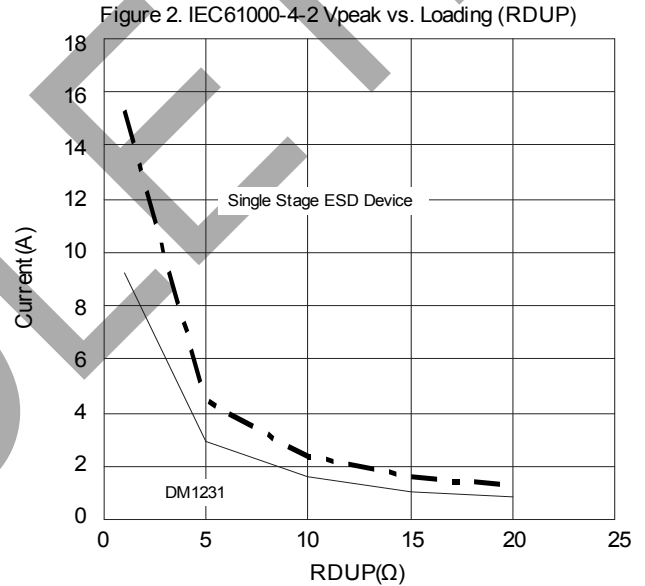
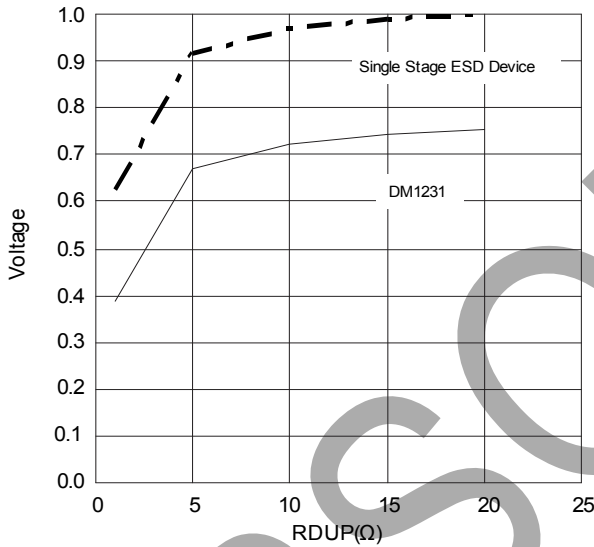
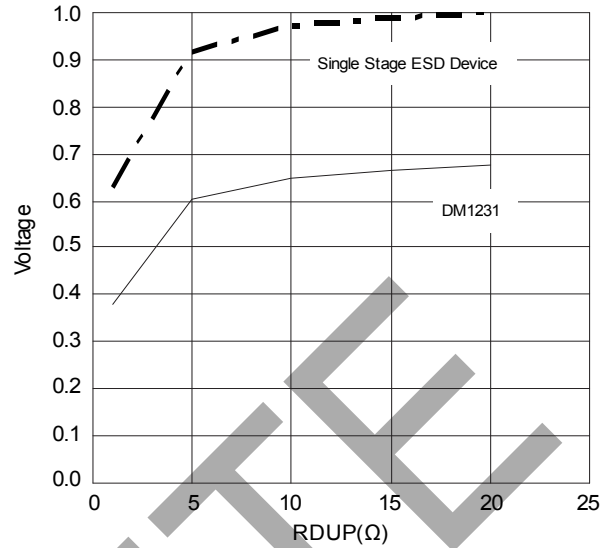
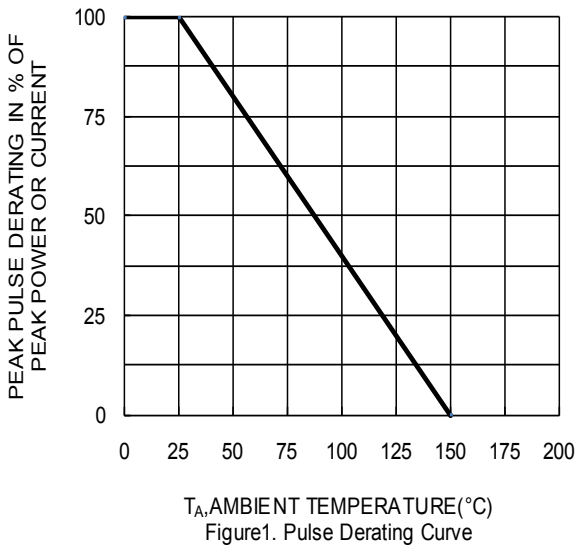
## Thermal Characteristics

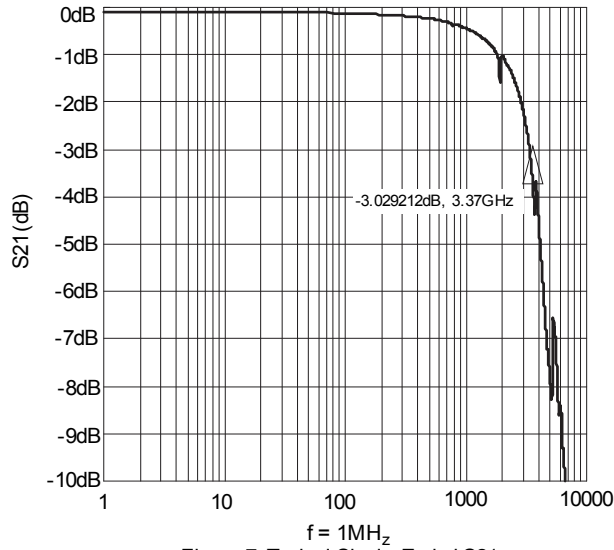
Characteristic	Symbol	Value	Unit
Power Dissipation Typical (Note 6)	P <sub>D</sub>	300	mW
Thermal Resistance, Junction to Ambient Typical (Note 6)	R <sub>θJA</sub>	417	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

## Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Operating Supply Voltage	V <sub>P</sub>	—	5	5.5	V	—
Reverse Current (Note 7)	I <sub>R</sub>	—	—	1	μA	V <sub>P</sub> = 5V, V <sub>P</sub> to V <sub>N</sub>
Diode Forward Voltage	V <sub>F</sub>	0.6	0.8	0.95	V	I <sub>F</sub> = 8mA, Top Diode
Diode Forward Voltage	V <sub>F</sub>	0.6	0.8	0.95	V	I <sub>F</sub> = 8mA, Bottom Diode
Residual ESD Peak Current on RDUP (Resistance of Device Under Protection)	I <sub>RES</sub>	—	2.3	—	A	IEC 61000-4-2 contact mode 8kV, RDUP = 5Ω
Channel Clamping Voltage (Note 8)	V <sub>CL_Positive</sub>	—	+9	—	V	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs
	V <sub>CL_Negative</sub>	—	-1.4	—	V	Zap at OUT, Measure at IN
Dynamic Resistance	R <sub>DYN_Positive</sub>	—	0.4	—	Ω	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs
	R <sub>DYN_Negative</sub>	—	0.3	—	Ω	Zap at OUT, Measure at IN
Channel Input Capacitance (Note 9)	C <sub>OUT</sub>	—	1.5	—	pF	f = 1MHz, V <sub>P</sub> = 5V, V <sub>OSC</sub> = 2.5V, V <sub>OSC</sub> = 30mV
Channel to Channel Capacitance Match	ΔC <sub>OUT</sub>	—	0.02	—	pF	f = 1MHz, V <sub>P</sub> = 5V, V <sub>OSC</sub> = 2.5V, V <sub>OSC</sub> = 30mV
Series Resistance	R <sub>S</sub>	—	1	—	Ω	—
Channel to Channel Resistance Match	ΔR <sub>S</sub>	—	±10	±30	mΩ	—

- Notes:
- Standard test condition is IEC61000-4-2 level 4 test circuit with each (A<sub>OUT</sub>/B<sub>OUT</sub>) pin subjected to ±12kV contact discharge for 1000 pulses. Discharges are timed at 1 second intervals and all 1000 strikes are completed in one continuous test run.
  - Device mounted on FR-4 PCB pad layout (2oz copper) as shown on Diodes, Inc. suggested pad layout, which can be found on our website at <http://www.diodes.com/package-outlines.html>.
  - Short duration pulse test used to minimize self-heating effect.
  - Clamping voltage value is based on an 8x20μs peak pulse current (I<sub>PP</sub>) waveform.
  - Capacitance measured from V<sub>OUT</sub> to V<sub>N</sub> with V<sub>IN</sub> floating.

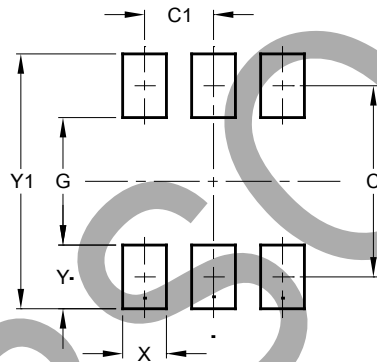




## Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### SOT26 (SC74R)

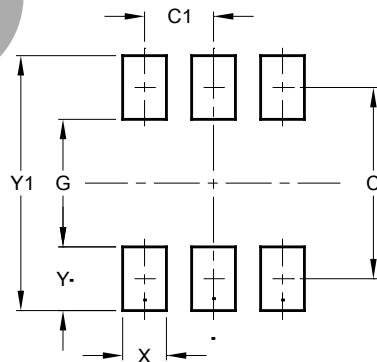


Dimensions	Value (in mm)
C	2.40
C1	0.95
G	1.60
X	0.55
Y	0.80
Y1	3.20

## Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### SOT26 (SC74R)



Dimensions	Value (in mm)
C	2.40
C1	0.95
G	1.60
X	0.55
Y	0.80
Y1	3.20

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