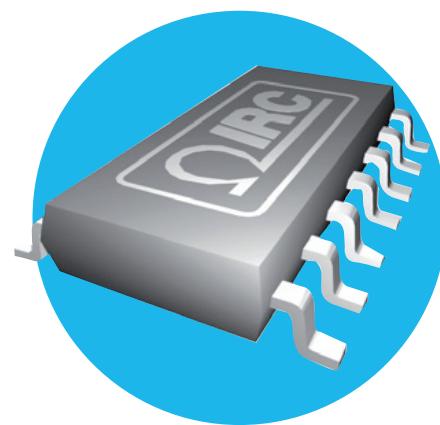


Surface Mount TVS Diode Array

QDN005LF Series

- Protects up to 8 data lines
- Low operating and clamping voltages
- Working voltages from 5 to 24V
- Low leakage current
- RoHS compliant



 All Pb-free parts comply with EU Directive 2011/65/EU (RoHS2)

Applications

RS-232 and RS-432 Data Lines
Desktop and Portable Computers
Microprocessor Based Equipment
LAN/WAN Communication Equipment
Wireless Communication Equipment

IEC Compatibility

61000-4-2 (ESD): Air ± 15 kV, Contact ± 8 kV
61000-4-4 (EFT): 40A - 5/50ns
61000-4-5 (Lightning): 12A, 8/20 μ s

Characteristic Data

	Rated Reverse Standoff Voltage V_{RWM} (Volts)	Minimum Reverse Breakdown Voltage $V_{(BR)}$ $I_t = 1mA$ (Volts)	Maximum Clamping Voltage V_c $I_p = 1A$ (Volts)	Maximum Pulse Current I_{pp} $t_p = 8/20\mu s$ (A)	Maximum Reverse Leakage Current I_R $@ V_{RWM}$ (μ A)	Maximum Capacitance C $V=0$ $f = 1MHz$ (pF)
QDN005LF-05	5.0	6.0	9.8	17.0	20	350
QDN005LF-12	12.0	13.3	19.0	12.0	1	120
QDN005LF-15	15.0	16.7	24.0	10.0	1	75
QDN005LF-24	24.0	26.7	43.0	5.0	1	50

Maximum Ratings

Peak Pulse Power ($t_p = 8/20\mu s$) P_{pp}	Operating Temperature T_j	Storage Temperature T_{STG}	Solder Temperature (10 seconds) T_{II}
300W	-55°C to +150°C	-55°C to +150°C	260°C

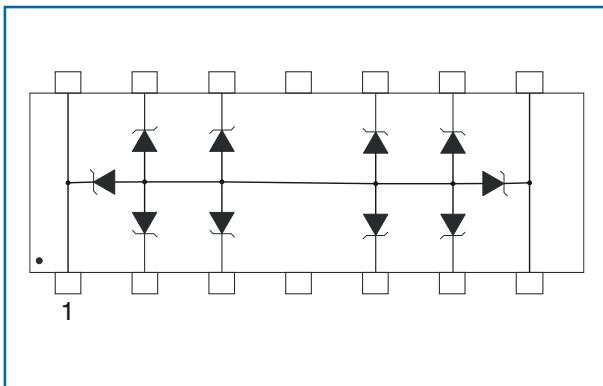
General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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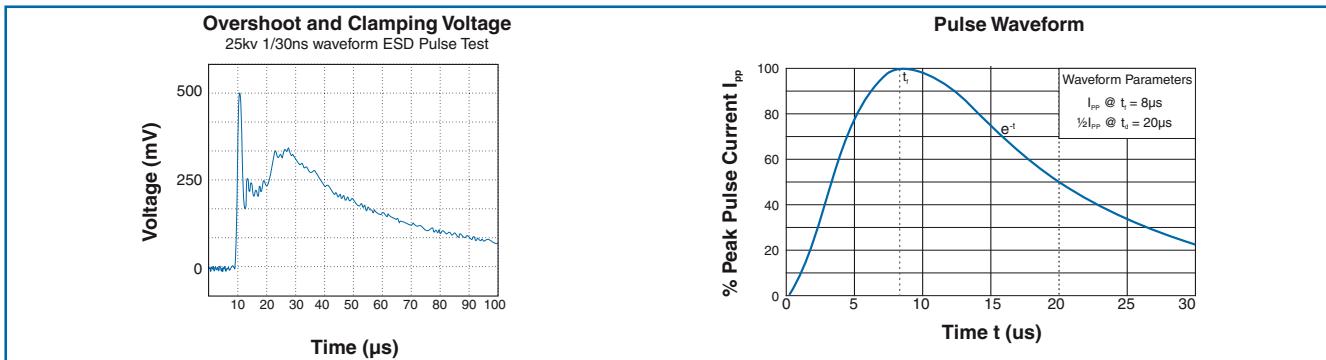
Schematic Data



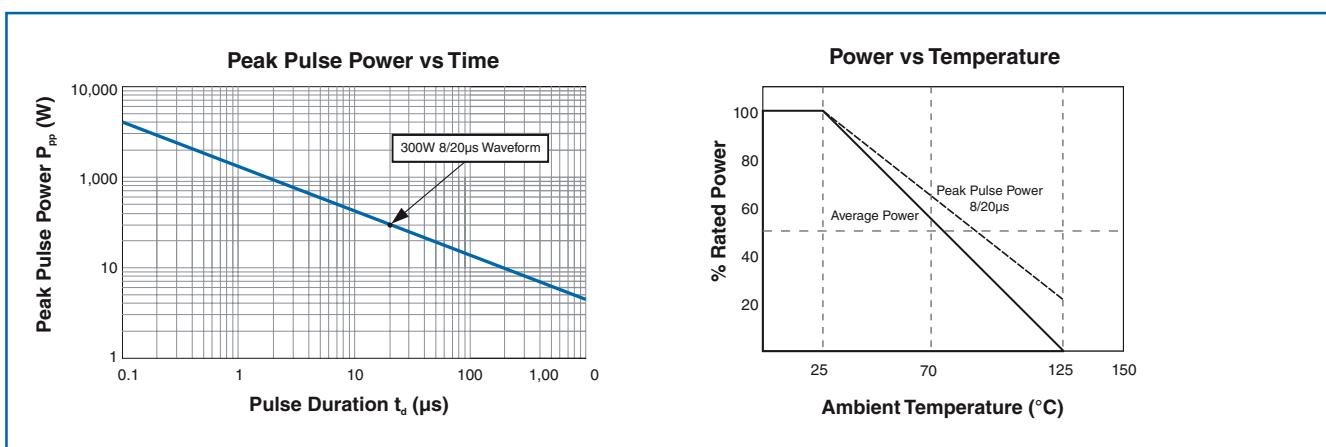
Discharge Data (IRC 61000-4-2)

Level	Initial Peak Current (A)	Peak Current 30ns (A)	Peak Current 60ns (A)	Test Voltage Contact (kV)	Test Voltage Air (kV)
1	7.5	4.0	8.0	2.0	2.0
2	15.0	8.0	4.0	4.0	4.0
3	22.5	12.0	6.0	6.0	8.0
4	30.0	16.0	8.0	8.0	15.0

ESD Pulse Waveform Data



Power Rating Data



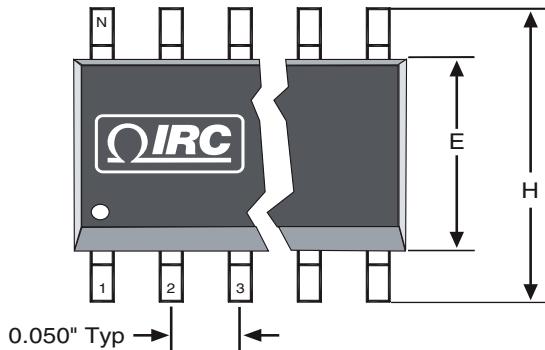
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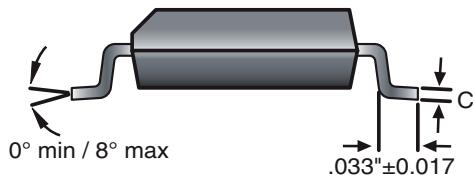
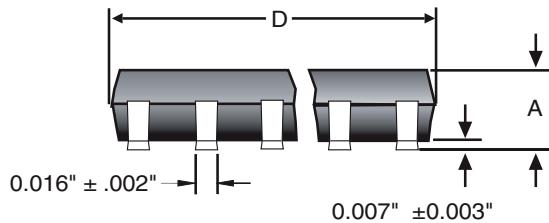
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Physical Data



	QDN005
D	0.341"±0.004
H	0.236"±0.008
E	0.153"±0.004
A	0.061"±0.008
C	0.008"±0.002



Notes.

All dimensions exclude mold flash, end flash and metal burrs which shall not exceed 0.015" per side.

Maximum lead coplanarity is 0.004".

Ordering Data

Prefix DNR - QDN005LF - 05 - T07

Model QDN005LF = TVS Array in a 14-Pin SOIC-N Package

Characteristic Code
 05 = 5.0V Reverse Standoff Voltage
 12 = 12.0V Reverse Standoff Voltage
 15 = 15.0V Reverse Standoff Voltage
 24 = 24.0V Reverse Standoff Voltage

Packaging
 BK = Tubes (56 count)
 T07 = 7" Reel (500 count)

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