# Surface Mount SOT-23 TVS Diode Array

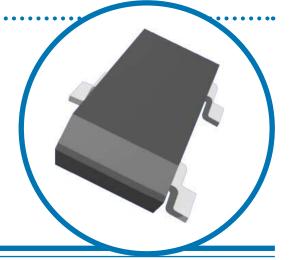


#### **QDN007LF** Series

- ESD protection > 40KV
- 500 Watts peak pulse power per line (tp=8/20µs)

**OBSOLETE** 

- Available in multiple voltage types: 3.3V to 36V
- Unidirectional & bidirectional confi gurations
- RoHS compliant



#### Applications

Wireless Communication Circuits RS-422, RS-432, RS-485 Portable Electronics Cellular Phones

#### **IEC Compatibility**

61000-4-2 (ESD): Air - 15kV, Contact - 8kV 61000-4-4 (EFT): 40A - 5/50ns 61000-4-5 (Surge): 12A, 8/20µs Level 2 (Line-Ground) and Level 3 (Line-Line)

#### Characteristic Data

	Rated Standoff Voltage V <sub>WM</sub> (Volts)	Minimum Breakdown Voltage V <sub>(BR)</sub> (Volts)	Maximum Clamping Voltage $I_p = 1A$ (Volts)	Maximum Pulse Clamping Voltage $t_r - t_d$	Maximum Leakage Current <i>@V<sub>WM</sub> Ι<sub>D</sub></i> (μΑ)	Typical Capacitance C V=0 f = 1MHz (pF)	
QDN007LF-U03 QDN007LF-B03	3.3	4.0	6.5 7.0	10.9V @ 43.0A	125	500 300	
QDN007LF-U05 QDN007LF-B05	5.0	6.0	9.8	13.5V @ 42.0A	20	350 210	
QDN007LF-U08 QDN007LF-B08	8.0	8.5	13.4	16.9V @ 34.0A	10	250 150	
QDN007LF-U12 QDN007LF-B12	12.0	13.3	19.0	25.9V @ 21.0A	2	150 90	
QDN007LF-U15 QDN007LF-B15	15.0	16.7	24.0	30.0V @ 17.0A	1	100 60	
QDN007LF-U24 QDN007LF-B24	24.0	26.7	43.0	49.0V @ 12.0A	1	88 63	
QDN007LF-U36 QDN007LF-B36	36.0	40.0	51.0	76.8V @ 9.0A	1	80 60	

#### **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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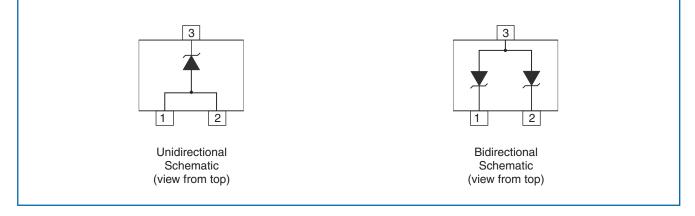


### **Maximum Ratings**

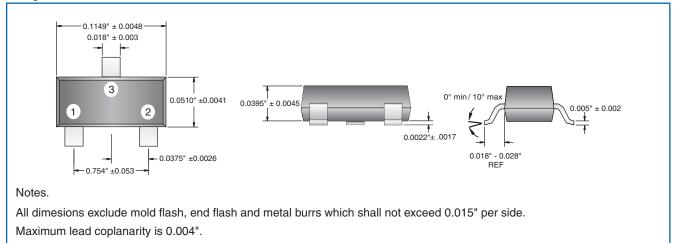
Peak Pulse Power (t <sub>p</sub> = 8/20µs)	Operating Temperature	Storage Temperature	Forward Voltage 50mA 300µs - Square Wave		
P <sub>pp</sub>	T <sub>i</sub>	Т <sub>sтg</sub>	V <sub>F</sub>		
500W	-55°C to +150°C	-55°C to +150°C	1.5		

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#### Schematic Data



## Physical Data



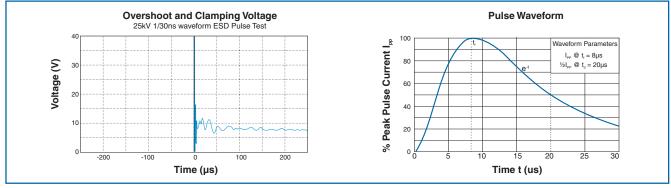
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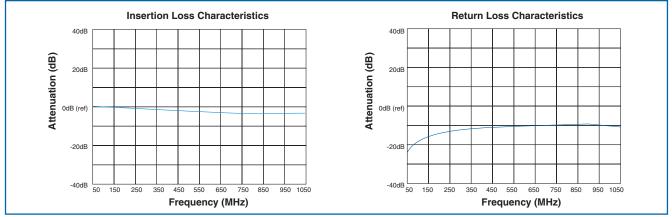




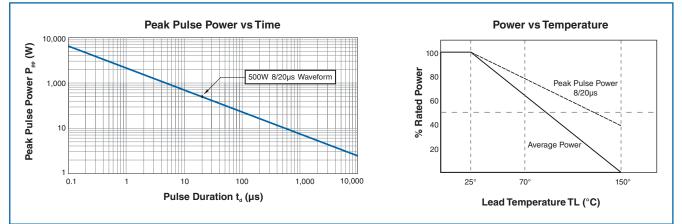
#### **ESD** Pulse Data



### Loss Characteristic Data



## Power Rating Data



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## Ordering Data

0						
Prefix ·····		·· DNR -	QDN007	- в	05 -	· T13
			:			
Model	•••••		:	:	:	
QDN007LF = SOT23 TVS Diode Network with with 100% matter tin plated terminations						:
					:	:
<b>Schematic</b>	• • • • • • • • • • • • • • • • • • • •	•••••	•••••	•••	:	
B = Bidirectional					÷	:
						:
Characteristic Code						:
03 = 3.3V Standoff Voltage						:
05 = 5.0V Standoff Voltage 08 = 8.0 V Standoff Voltage						
12 = 12.0V Standoff Voltage 15 = 15.0V Standoff Voltage						:
24 = 24.0V Standoff Voltage						:
36 = 36.0V Standoff Voltage						:
						:
Packaging						
T07 = 7" Reel (3.000 count)						

T13 = 13" Reel (3,000 count) T13 = 13" Reel (10,000 count)

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