

## Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	85	٧
RMS Reverse Voltage		V <sub>R(RMS)</sub>	60	V
Forward Current (Single Diode)		I <sub>FM</sub>	200	mA
Repetitive Peak Forward Current		I <sub>FRM</sub>	450	mA
·	@ t = 1.0µs @ t = 1.0ms @ t = 1.0s	I <sub>FSM</sub>	4.0 1.0 0.5	А

## **Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P <sub>D</sub>	200	mW
Thermal Resistance Junction to Ambient Air (Note 5)	$R_{ hetaJA}$	625	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

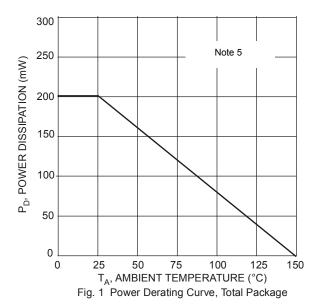
## Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

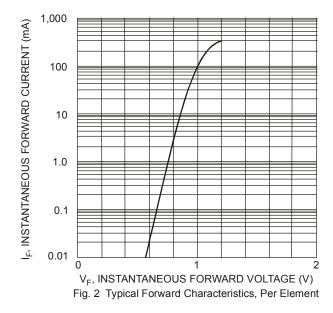
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	$V_{(BR)R}$	85	1	_	V	$I_R = 100 \mu A$
Forward Voltage	V <sub>F</sub>	_	l	0.80 0.90 1.0 1.25	V	I <sub>F</sub> = 1.0mA I <sub>F</sub> = 10mA I <sub>F</sub> = 50mA I <sub>F</sub> = 150mA
Leakage Current (Note 6)	I <sub>R</sub>	_	I	2.5 30 50	μΑ	$V_R = 70V$ $V_R = 25V$ , $T_J = 150^{\circ}C$ $V_R = 70V$ , $T_J = 150^{\circ}C$
Total Capacitance (per element)	C <sub>T</sub>	_	2	_	pF	V <sub>R</sub> = 0, f = 1.0MHz
Capacitance Between Two Data Lines (DL <sub>1</sub> & DL <sub>2</sub> , DL <sub>1</sub> & DL <sub>3</sub> )	$C_{LL}$	_	1.6	2.0	pF	V <sub>R</sub> = 0, f = 1.0MHz
Capacitance Between Data Line and Ground	$C_{LG}$	_	2.3	3.0	pF	V <sub>R</sub> = 0, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	_	_	3.0	μs	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$

Notes:

- 5. Device mounted on FR-4 PCB, 1.5 inch x 1.5 inch; 2oz copper with 1" x 1" pad layout. 6. Short duration pulse test used to minimize self-heating effect.







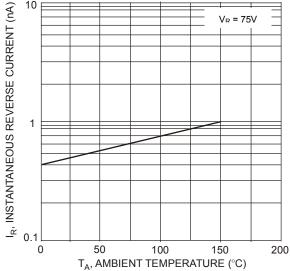
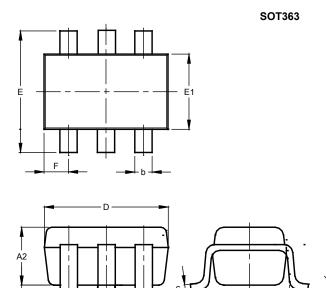


Fig. 3 Typical Reverse Characteristics, Per Element



## **Package Outline Dimensions**

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

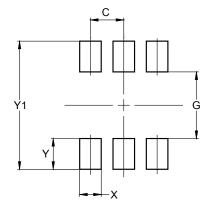


SOT363					
Dim	Min	Max	Тур		
A1	0.00	0.10	0.05		
A2	0.90	1.00	0.95		
b	0.10	0.30	0.25		
С	0.10	0.22	0.11		
D	1.80	2.20	2.15		
Е	2.00	2.20	2.10		
E1	1.15	1.35	1.30		
е	0.650 BSC				
F	0.40	0.45	0.425		
L	0.25	0.40	0.30		
а	0°	8°			
All Dimensions in mm					

# Suggested Pad Layout

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

### **SOT363**



Dimensions	Value		
Dillielisiolis	(in mm)		
С	0.650		
G	1.300		
Х	0.420		
Υ	0.600		
Y1	2.500		



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