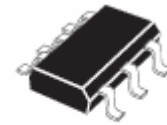


## Applications

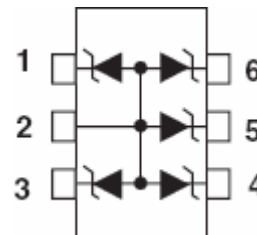
- Computers
- Printers
- Communication systems
- Cellular phones handsets and accessories
- Wireline and wireless telephone sets
- Set top boxes



**SOT-363**

## Features

- 5 Unidirectional Transil functions
- Breakdown voltage:
- VBR = 6.1 V min. and 25 V min.
- Low leakage current: < 1 mA
- Very small PCB area < 4.2 mm<sup>2</sup> typically
- High ESD protection level: up to 25 kV
- High integration
- Device marking:WF
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



## Complies with the following standards

### IEC61000-4-2

Level 4 15 kV (air discharge)  
9 kV(contact discharge)

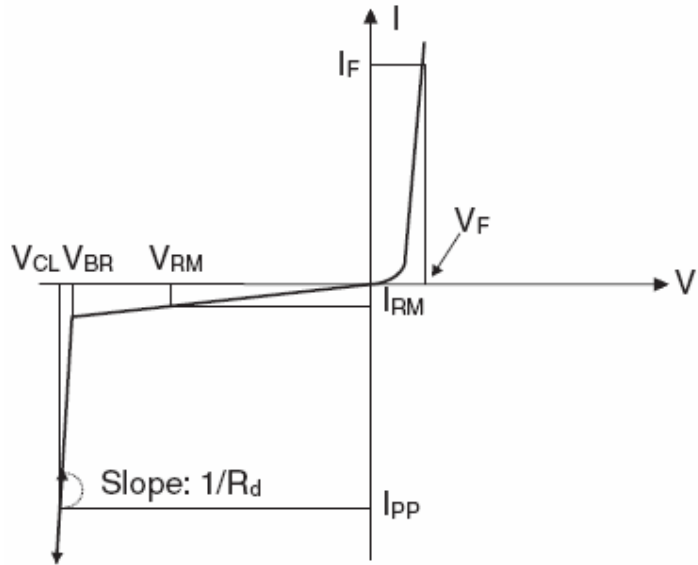
### MIL STD 883E - Method 3015-7 Class 3

25 kV HBM (Human Body Model)

<b>Absolute Ratings (<math>T_{amb}=25^{\circ}C</math>)</b>			
Symbol	Parameter	Value	Units
$P_{PP}$	Peak Pulse Power ( $t_p = 8/20\mu s$ )	100	W
$T_L$	Maximum lead temperature for soldering during 10s	260	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-40 to +125	$^{\circ}C$
$T_{op}$	Operating Temperature Range	-40 to +125	$^{\circ}C$

## Electrical Parameter

Symbol	Parameter
$V_{RM}$	Stand-off voltage
$V_{BR}$	Breakdown voltage
$V_{CL}$	Clamping voltage
$I_{RM}$	Leakage current
$I_{PP}$	Peak pulse current
$I_R$	Reverse current
$I_F$	Forward current
$\alpha T$	Voltage temperature coefficient
$V_F$	Forward voltage drop
$C$	Capacitance
$R_d$	Dynamic



## Electrical Characteristics

$V_{BR}$		$I_R$	$V_{RM}$	$I_{RM}$	$V_F$	$I_F$	$R_d$	$\alpha T$	$C$
Min.	Max.				Max.				
v	v	mA	v	$\mu A$	v	mA	$\Omega$	$10^{-4}/^{\circ}C$	pF
5	7.2	1	5	1	1.25	200	0.61	6	50

1. Square pulse  $I_{PP}=15A, t_p=2.5\mu s$  2.  $V_{BR}=\alpha T*(T_{amb}-25^{\circ}C)*V_{BR}(25^{\circ}C)$

## Typical Characteristics

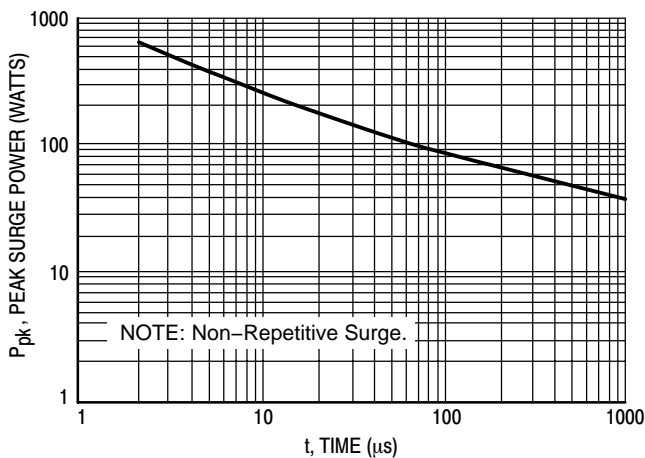


Figure 1. Pulse Width

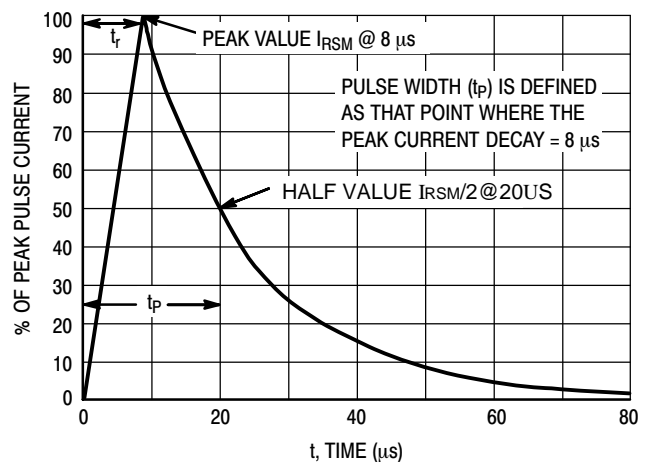
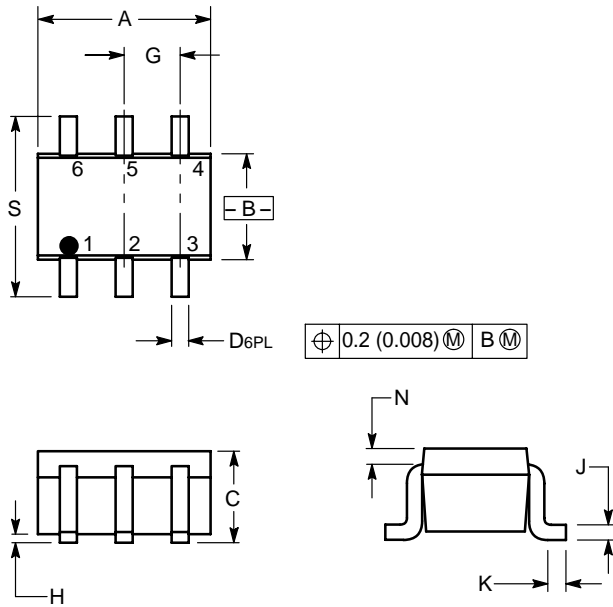


Figure 2. 8 x 20  $\mu s$  Pulse Waveform

## SC-88/SOT-363

### NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.031	0.043	0.80	1.10
D	0.004	0.012	0.10	0.30
G	0.026 BSC		0.65 BSC	
H	---	0.004	---	0.10
J	0.004	0.010	0.10	0.25
K	0.004	0.012	0.10	0.30
N	0.008 REF		0.20 REF	
S	0.079	0.087	2.00	2.20

- PIN 1. EMITTER 2  
 2. BASE 2  
 3. COLLECTOR 1  
 4. EMITTER 1  
 5. BASE 1  
 6. COLLECTOR 2

