

### Surface Mount Switching Multi-Chip Diode Array

**(Pb)** Lead(Pb)-Free

#### Features:

- \* Ultra High Speed Switching
- \* Ultra-Small Surface Mount Package
- \* For General Purpose Switching Applications
- \* High Conductance Power Dissipation

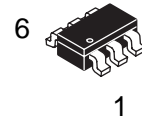
#### Mechanical Data:

- \* Case : TSOP-6
- \* Case Material : Molded Plastic. UL Flammability Classification Ration 94V-0
- \* Moisture Sensitivity : Level 1 per J-STD-020C
- \* Terminals : Solderable per MIL-STD-202, Method 208
- \* Polarity : See Diagram

**MULTI-CHIP DIODES**

**100m AMPERES**

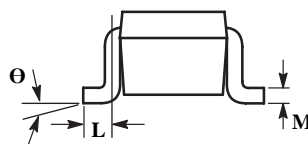
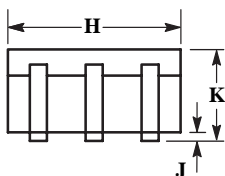
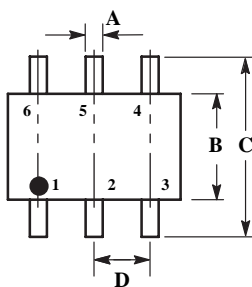
**80 VOLTS**



**TSOP-6**

### TSOP-6 Outline Dimensions

Unit:mm



TSOP-6		
Dim	Min	Max
A	0.25	0.50
B	1.30	1.70
C	2.50	3.00
D	0.85	1.05
θ	0°	10°
H	2.90	3.10
J	0.01	0.10
K	0.90	1.10
L	0.20	0.60
M	0.10	0.26

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

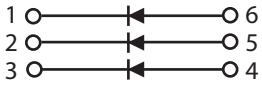
Characteristic	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	80	V
DC Reverse Voltage	$V_R$	80	V
Peak Forward Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	100	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\text{s}$	$I_{FSM}$	4.0	A
Power Dissipation (Note 1)	$P_D$	300	mW
Operating Temperature Range	$T_j$	+150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

Note 1 : Not to exceed 200mW per element.

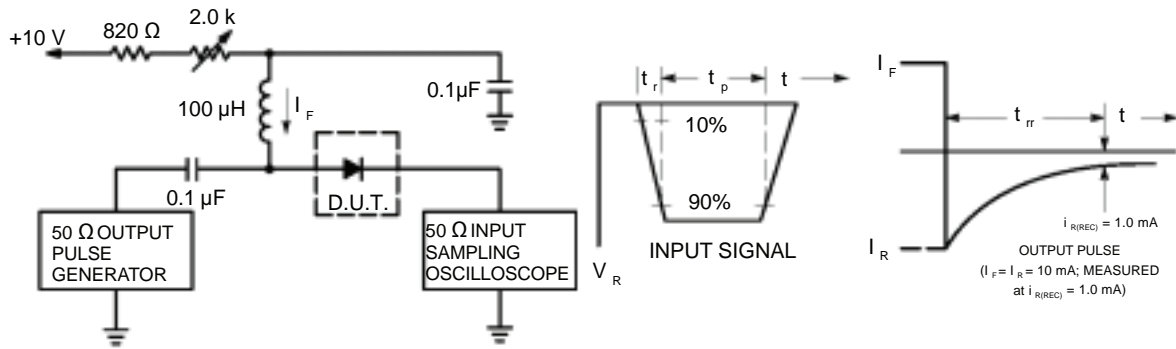
### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit
Forward Voltage $I_F = 100\text{mA}$	$V_F$	-	1.2	V
Reverse Current $V_R = 70\text{V}$	$I_R$	-	0.1	$\mu\text{A}$
Capacitance between terminals $V_R = 6\text{V}, f = 1.0\text{MHz}$	$C_T$	-	3.5	pF
Reverse Recovery Time $V_R = 6\text{V}, I_F = 5\text{mA}$	$T_{rr}$	-	4.0	ns

### Device Marking

Item	Marking	Equivalent Circuit diagram
WIMN10	N10	

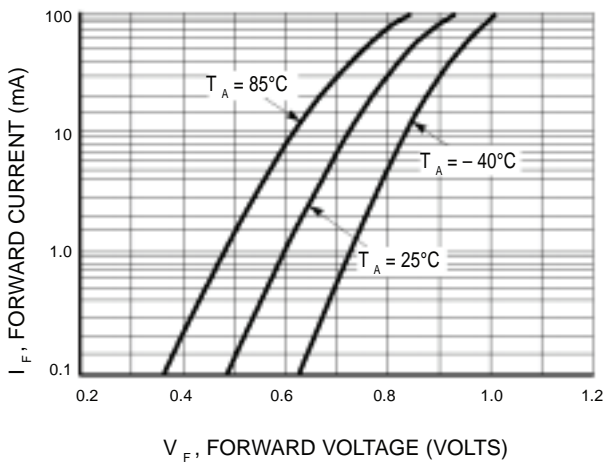
## Typical Characteristics



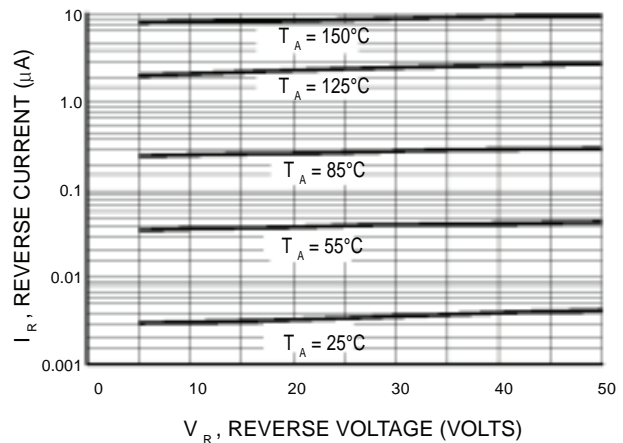
- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 10mA.  
 2. Input pulse is adjusted so  $I_{R(\text{peak})}$  is equal to 10mA.  
 3.  $t_p \gg t_{rr}$

**Figure 1. Recovery Time Equivalent Test Circuit**

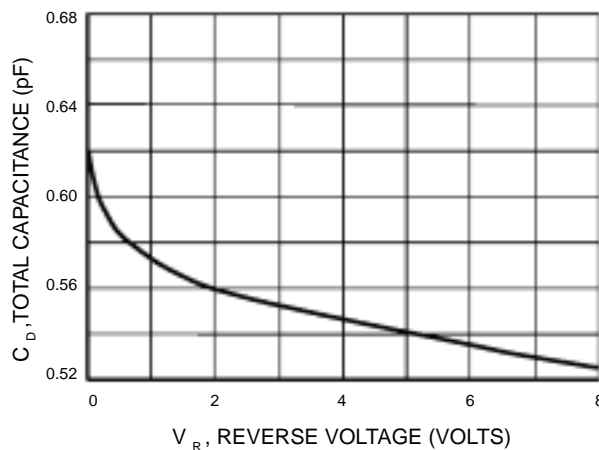
### CURVES APPLICABLE TO EACH DIODE



**Figure 2. Forward Voltage**



**Figure 3. Leakage Current**



**Figure 4. Capacitance**