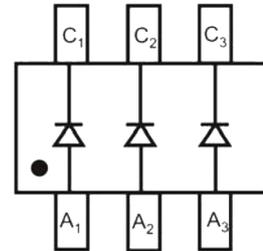
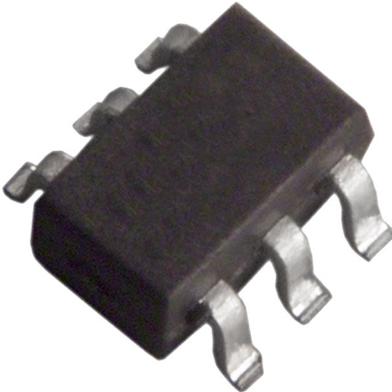


# Surface Mount Fast Switching Diode

multicomp **PRO**



SOT-363

## Features:

- Fast Switching Speed
- For General Purpose Switching Application
- Ultra-Small Surface Mount Package
- High Conductance

## Applications:

- For general purpose switching application

## Maximum Ratings:

$T_A = 25^\circ\text{C}$  unless otherwise specified.

Characteristic	Symbol	Value	Unit
Non-repetitive peak reverse Voltage	$V_{RM}$	100	V
Peak repetitive reverse Voltage Working peak reverse voltage DC reverse voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
Forward continuous current	$I_{FM}$	300	mA
Average rectified output current	$I_O$	150	mA
Non-Repetitive peak forward surge current at $t=1\mu\text{s}$ at $t=1\text{s}$	$I_{FSM}$	2 1	A
Power dissipation	$P_D$	200	mW
Thermal resistance, junction to ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction and storage temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$

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# Surface Mount Fast Switching Diode

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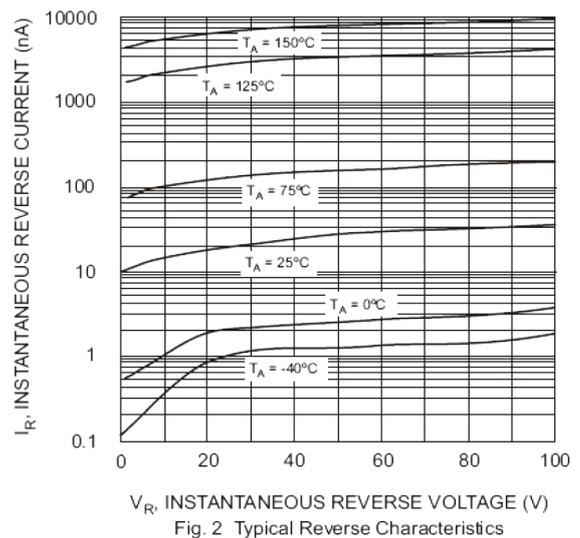
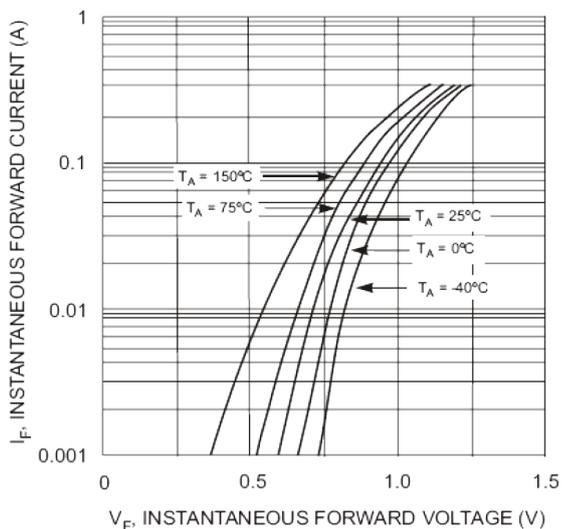
## Electrical Characteristics:

$T_A=25^\circ\text{C}$  unless otherwise specified.

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=1\mu\text{A}$	75	-	V
Forward voltage	$V_F$	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$	-	0.715 0.855 1 1.25	V
Total Capacitance	$C_T$	$V_{CB}=10\text{V}$ , $f=1\text{MHz}$ , $I_E=0$	-	2	pF
Reverse Recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1 \times I_R$ , $R_L=100\Omega$	-	4	ns

## Typical Characteristics:

$T_A = 25^\circ\text{C}$  unless otherwise specified.



# Surface Mount Fast Switching Diode

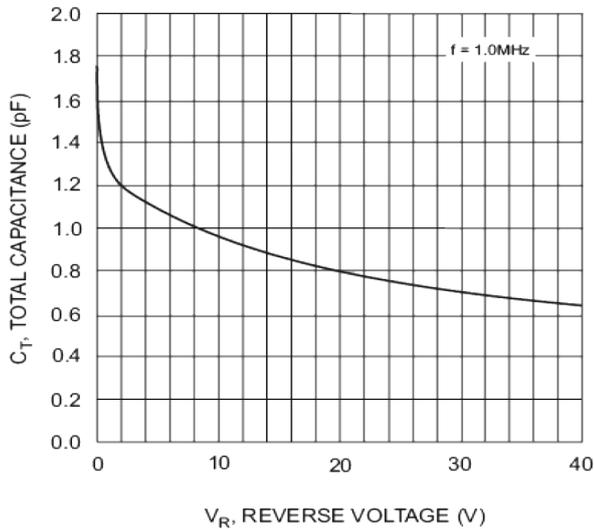


Fig. 3 Typical Capacitance vs. Reverse Voltage

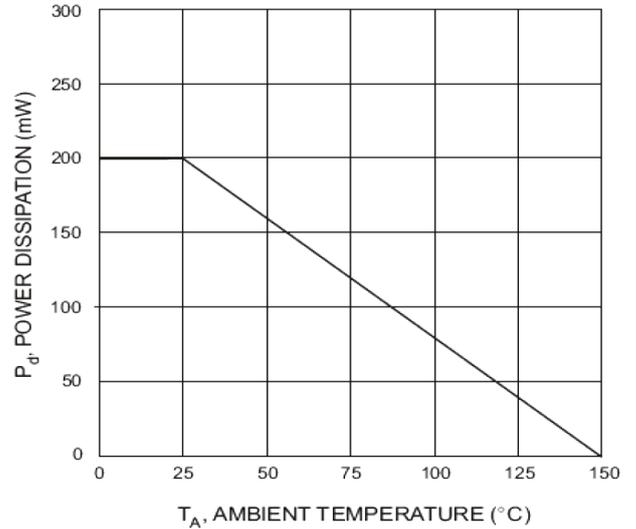
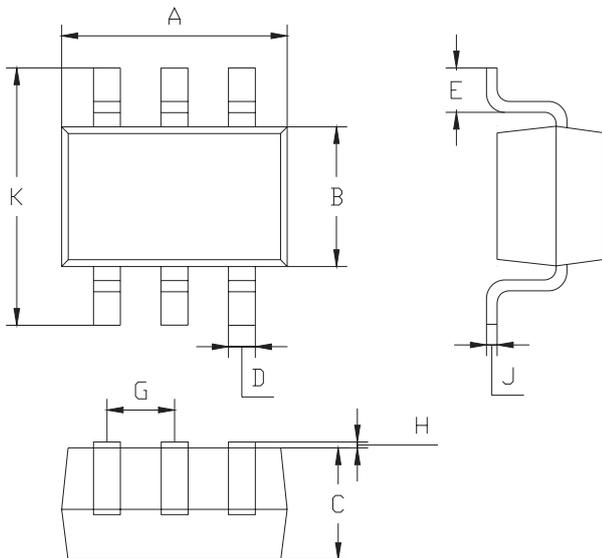


Fig. 4 Power Derating Curve

## Package Outline:

Plastic surface mounted package



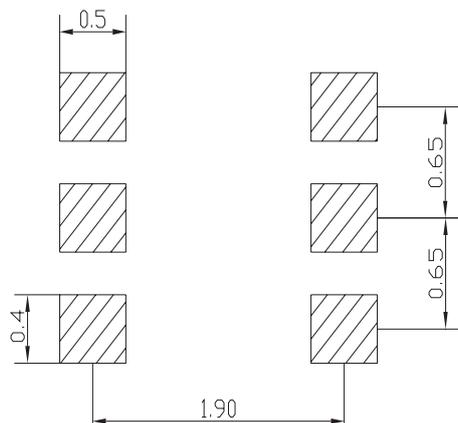
SOT-363		
Dim.	Min.	Max.
A	1.8	2.2
B	1.15	1.35
C	1 Typ.	
D	0.1	0.3
E	0.25	0.4
G	0.65 Typ.	
H	0.02	0.1
J	0.1 Typ.	
K	2.1	2.3

Dimensions : Millimetres

# Surface Mount Fast Switching Diode

**multicomp** PRO

## Soldering Footprint:



Dimensions : Millimetres

## Package Information:

Device	Package	Shipping
BAS16TW-7-F	SOT-363	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Surface Mount Fast Switching Diode	BAS16TW-7-F

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