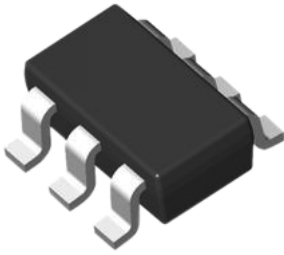
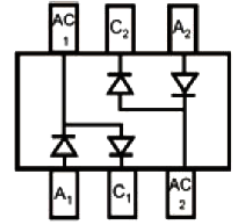


# Surface Mount Fast Switching Diode



## Features:

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



**SOT-363**

## Applications:

High speed switching application

## Max. Rating @ TA = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	$V_{RM}$	100	V
Peak repetitive peak reverse voltage	$V_{RRM}$	80	V
Working peak reverse voltage	$V_{RMS}$		
DC reverse voltage	$V_R$		
RMS reverse voltage	$V_{R(RMS)}$	57	V
Forward continuous current	$I_{FM}$	500	mA
Average rectified output current	$I_o$	250	mA
Forward surge current	$I_{FSM}$	@t = 1µs 4	A
		@t = 1s 2	
Power dissipation	$P_D$	200	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	625	°C/W
Operating and storage temperature range	$T_j, T_{STG}$	-65 to +150	°C

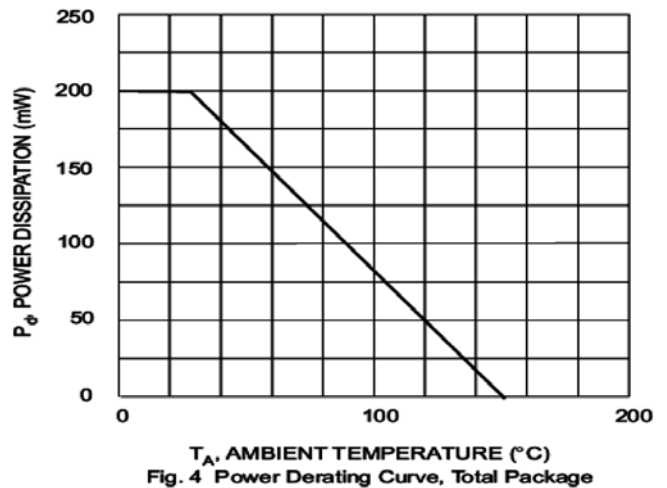
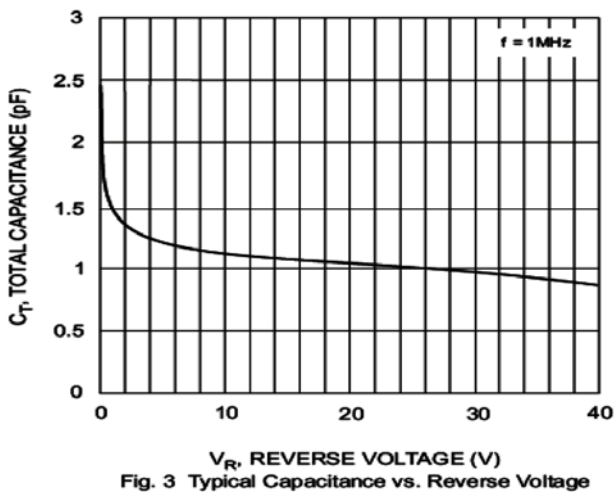
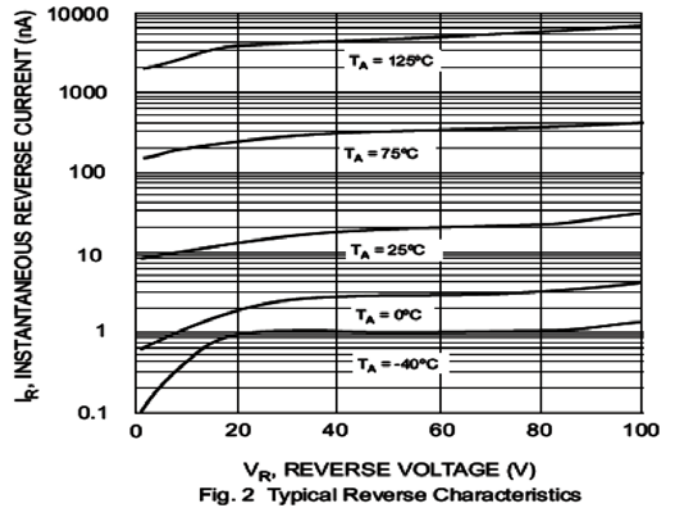
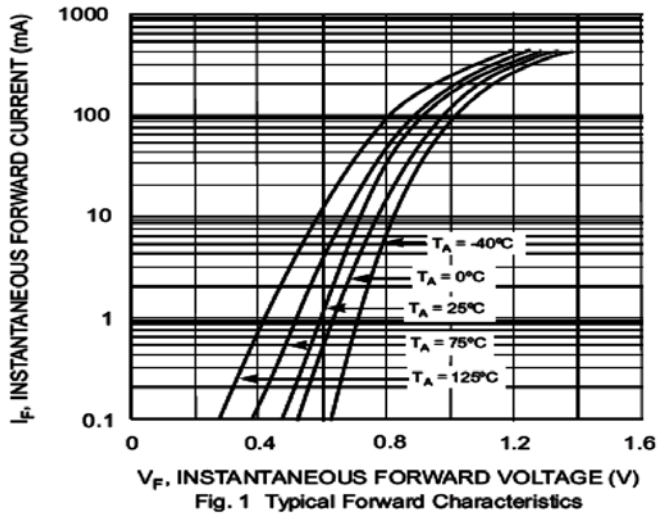
## Electrical Characteristics @ TA = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{R(BR)}$	$I_R = 100\mu A$	80	-	V
Average reverse current	$I_R$	$V_R = 70V$	-	100	nA
		$V_R = 75V, T_j = 150^\circ C$	-	50	uA
		$V_R = 25V, T_j = 150^\circ C$	-	30	uA
		$V_R = 20V$	-	25	nA
Forward voltage	$V_F$	$I_F = 5mA$	0.62	0.72	V
		$I_F = 10mA$	-	0.855	
		$I_F = 100mA$	-	1	
		$I_F = 150mA$	-	1.25	
Total Capacitance	$C_T$	$V_R = 6V, f = 1MHz$	-	2	pF
Reverse recovery time	$t_{rr}$	$I_F = 5mA, V_R = 6V$	-	4	ns

# Surface Mount Fast Switching Diode



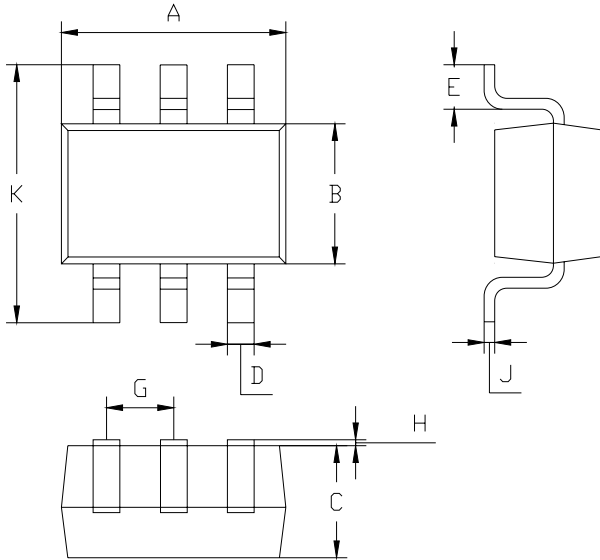
Typical Characteristics @  $T_A = 25^\circ\text{C}$  unless otherwise specified



# Surface Mount Fast Switching Diode

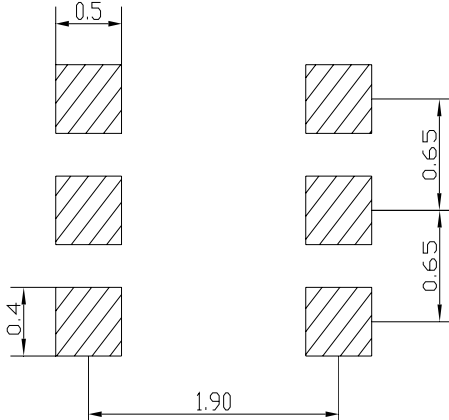


## Plastic surface mounted package



SOT-363		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.10	0.30
E	0.25	0.40
G	0.65 Typical	
H	0.02	0.10
J	0.1 Typical	
K	2.1	2.3
All Dimensions in mm		

## Soldering Footprint



Unit : mm

## Package Information

Device	Package	Shipping
MMBD4448HSDW-7-F	SOT-363	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Surface Mount Fast Switching Diode	MMBD4448HSDW-7-F

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