

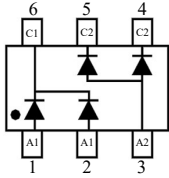


# AMMBD44484SDWH

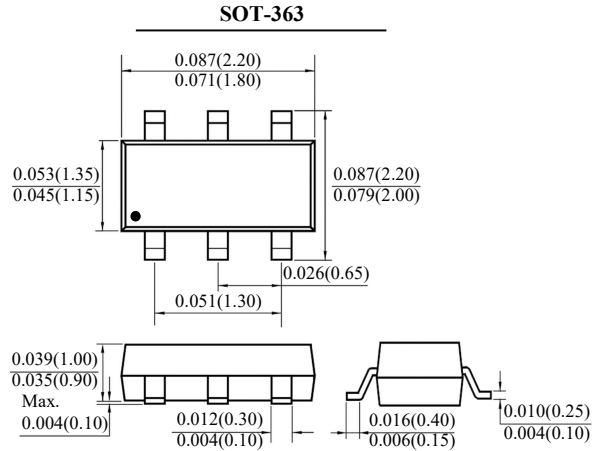
## SWITCHING DIODES

### FEATURES

- Fast Switching Speed
- AEC-Q101 qualified
- Suffix "H" indicates Halogen-free parts, ex. AMMBD44484SDWH



Top view  
Internal Schematic



Dimensions in inch and (millimeter)

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	80	V
Reverse Voltage	$V_R$	80	V
Average Rectified Output Current	$I_{F(AV)}$	100	mA
Forward Continuous Current	$I_{FM}$	300	mA
Surge Current	$I_{FSM}$	2	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

Note:

1. Device mounted on FR-4 substrate PC board, with minimum recommended pad layout.

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

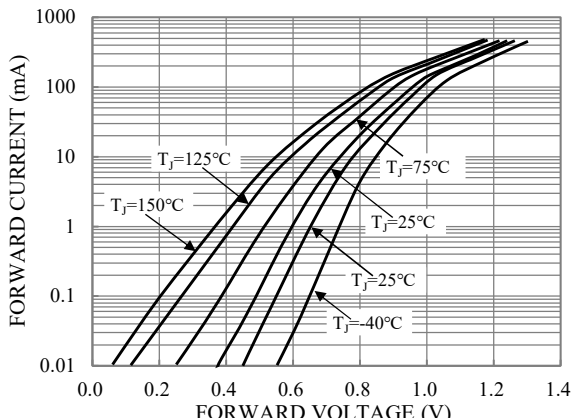
Parameter	Conditions	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 10\mu\text{A}$	$V_{(BR)R}$	80	-	V
Forward Voltage	$I_F = 100\text{mA}$	$V_F$	-	1.2	V
Reverse Current	$V_R = 70\text{V}$	$I_R$	-	0.1	$\mu\text{A}$
Total Capacitance	$V_R = 6\text{V}, f = 1\text{MHz}$	$C_T$	-	3.5	pF
Reverse Recovery Time	$I_F = 10\text{mA}, V_R = 6\text{V}, I_{tr} = 0.1 \times I_R,$ $R_L = 100\Omega$	$t_{rr}$	-	4	ns



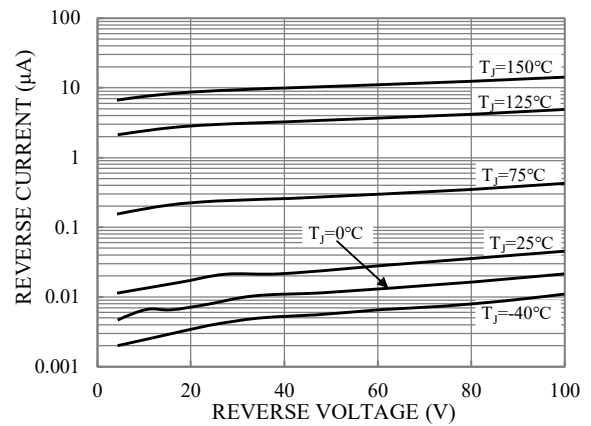
# AMMBD44484SDWH

## SWITCHING DIODES

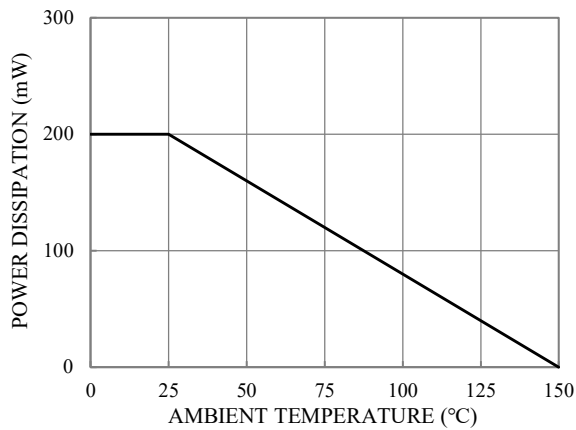
### RATINGS AND CHARACTERISTIC CURVES



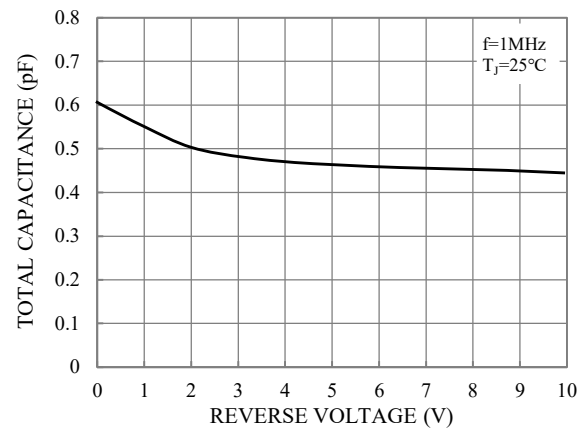
**Fig.1-TYPICAL FORWARD CHARACTERISTICS**



**Fig.2-TYPICAL REVERSE CHARACTERISTICS**



**Fig.3-POWER DERATING CURVE**



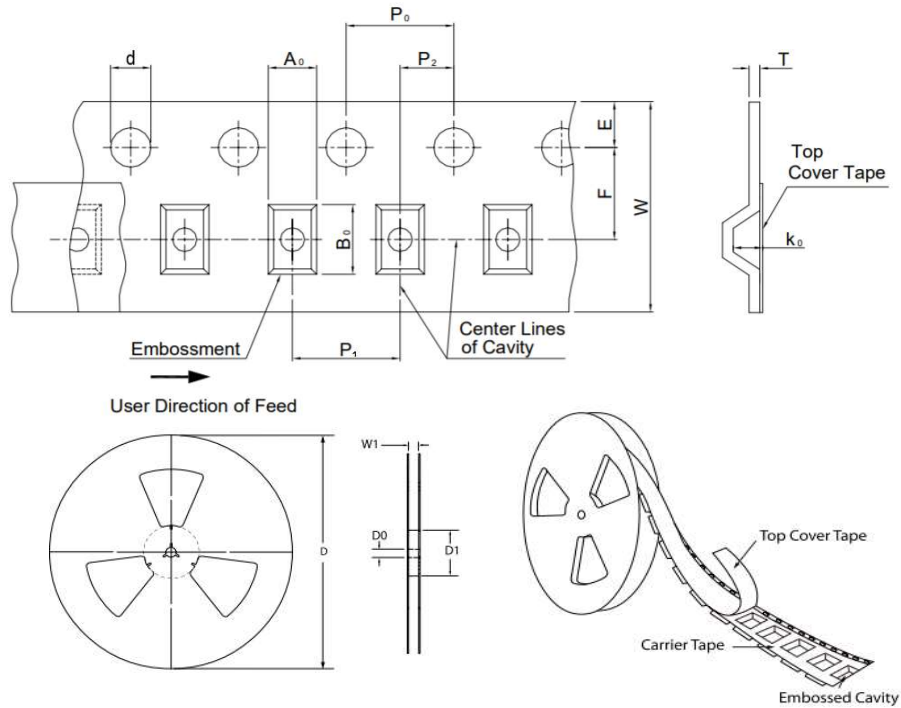
**Fig.4-TOTAL CAPACITANCE**



# AMMBD44484SDWH

## SWITCHING DIODES

### TAPE & REEL SPECIFICATION



Item	Symbol	SOT-363
Carrier width	$A_0$	$2.40 \pm 0.10$
Carrier length	$B_0$	$2.40 \pm 0.10$
Carrier depth	$K_0$	$1.30 \pm 0.10$
Sprocket hole	$d$	$1.50 \pm 0.10$
Reel outside diameter	$D$	$178.00 \pm 2.00$
Feed hole width	$D_0$	$13.00 \pm 0.50$
Reel inner diameter	$D_1$	MIN. 50.00
Sprocket hole position	$E$	$1.75 \pm 0.10$
Punch hole position	$F$	$3.50 \pm 0.10$
Sprocket hole pitch	$P_0$	$4.00 \pm 0.10$
Punch hole pitch	$P_1$	$4.00 \pm 0.10$
Embossment center	$P_2$	$2.00 \pm 0.10$
Overall tape thickness	$T$	MAX. 0.60
Tape width	$W$	$8.00 \pm 0.30$
Reel width	$W_1$	MAX. 10.00

### ORDER INFORMATION

Package	Reel Size	Quantity
SOT-363	7"	3,000

### MARKING CODE

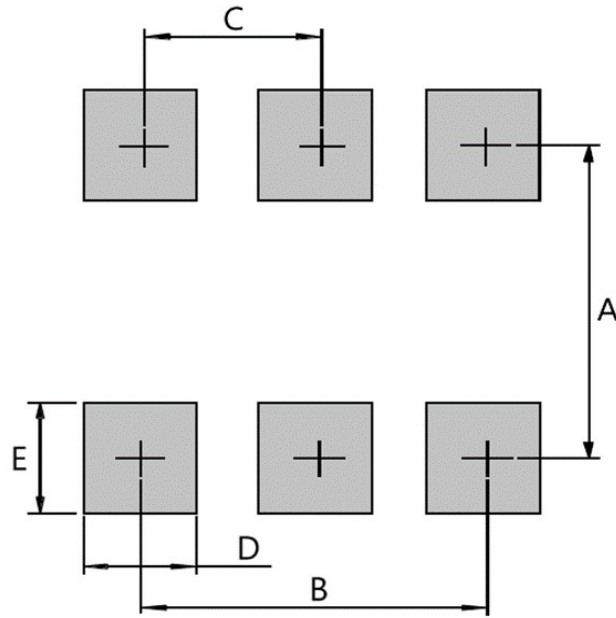
Part Number	Marking Code
AMMBD44484SDWH	BR



# AMMBD44484SDWH

## SWITCHING DIODES

### SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D	E
SOT-363	1.90	1.30	0.65	0.42	0.60