

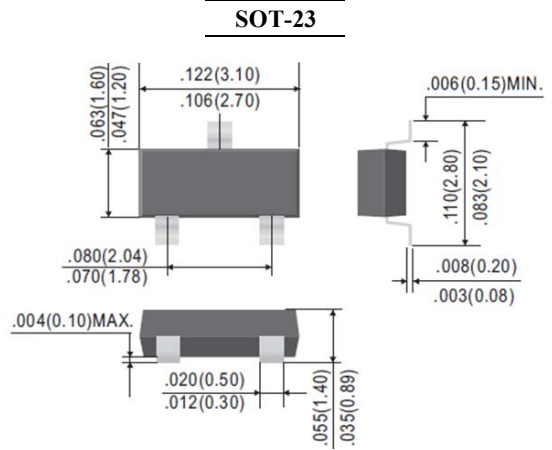
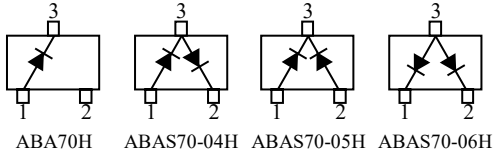


# ABAS70 SERIES

## SCHOTTKY BARRIER DIODES

### FEATURES

- Fast switching
- AEC-Q101 qualified
- Suffix "H" indicates Halogen-free parts, ex. ABAS70H.



**Dimensions in inch and (millimeter)**

### Maximum Ratings ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	70	V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	70	V
Maximum DC Blocking Voltage	$V_R$	70	V
Average Rectified Forward Current	$I_{F(AV)}$	70	mA
Peak Forward Surge Current at $t < 10\text{ms}$	$I_{FSM}$	100	mA
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction Ambient (Note 1)	$R_{\theta JA}$	500	$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	$T_J$	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note :

1. Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

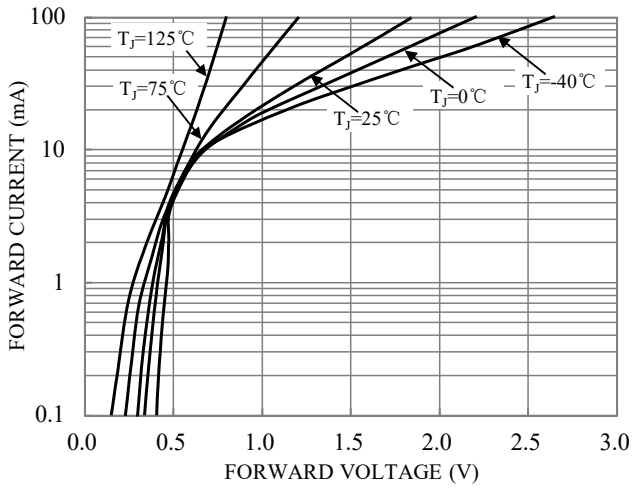
### Electrical Characteristics ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Min	Max	Unit
Forward Voltage	$I_F = 1\text{mA}$	$V_F$	-	0.41	V
	$I_F = 15\text{mA}$		-	1.00	
Reverse Breakdown Voltage	$I_R = 10\mu\text{A}$	$V_{(BR)R}$	70	-	V
Reverse Current	$V_R = 50\text{V}$	$I_R$	-	0.1	$\mu\text{A}$
Total Capacitance	$V_R = 0\text{V}$ , $f = 1\text{MHz}$	$C_T$	-	2	pF
Reverse Recovery Time	$I_F = I_R = 10\text{mA}$ , to $I_R = 1\text{mA}$ , $R_L = 100\Omega$	$t_{rr}$	-	5	ns

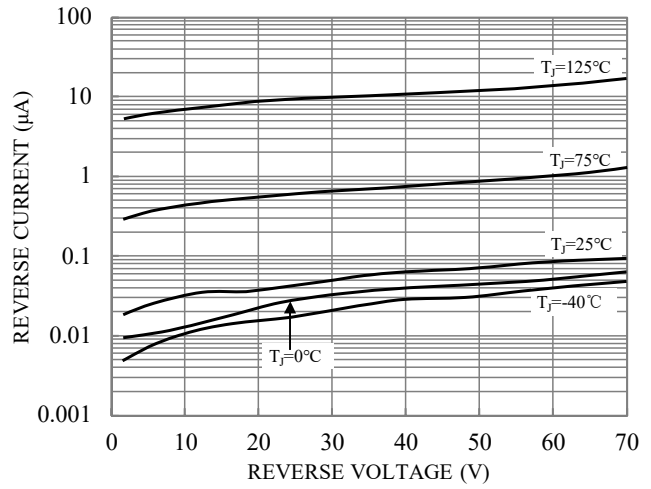


# ABAS70 SERIES SCHOTTKY BARRIER DIODES

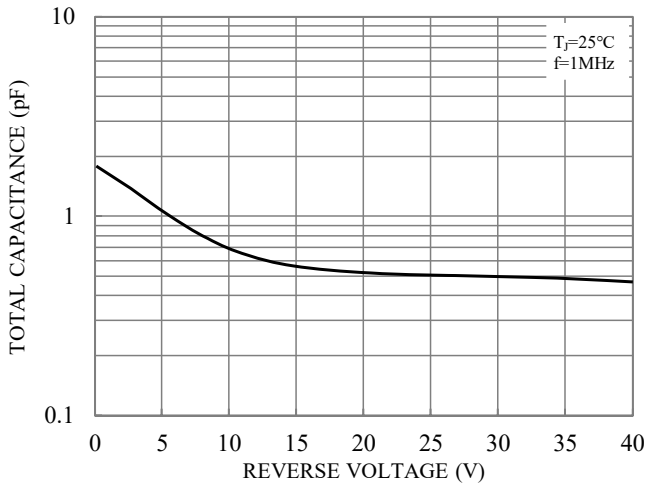
## RATINGS AND CHARACTERISTIC CURVES



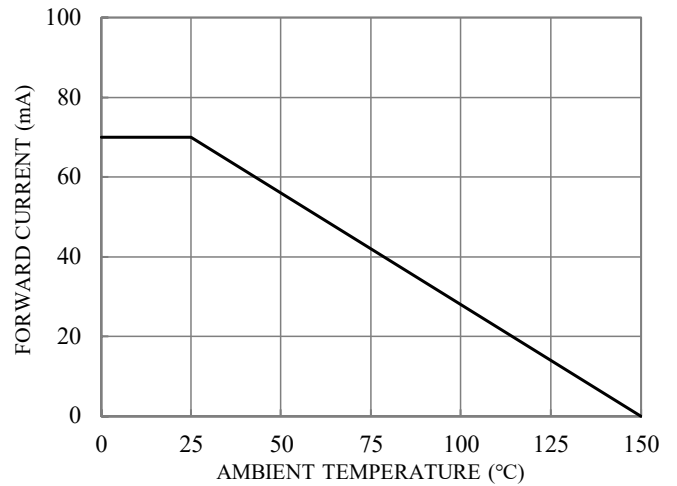
**Fig. 1-TYPICAL FORWARD CHARACTERISTICS**



**Fig. 2-TYPICAL REVERSE CHARACTERISTICS**



**Fig. 3-TYPICAL TOTAL CAPACITANCE**



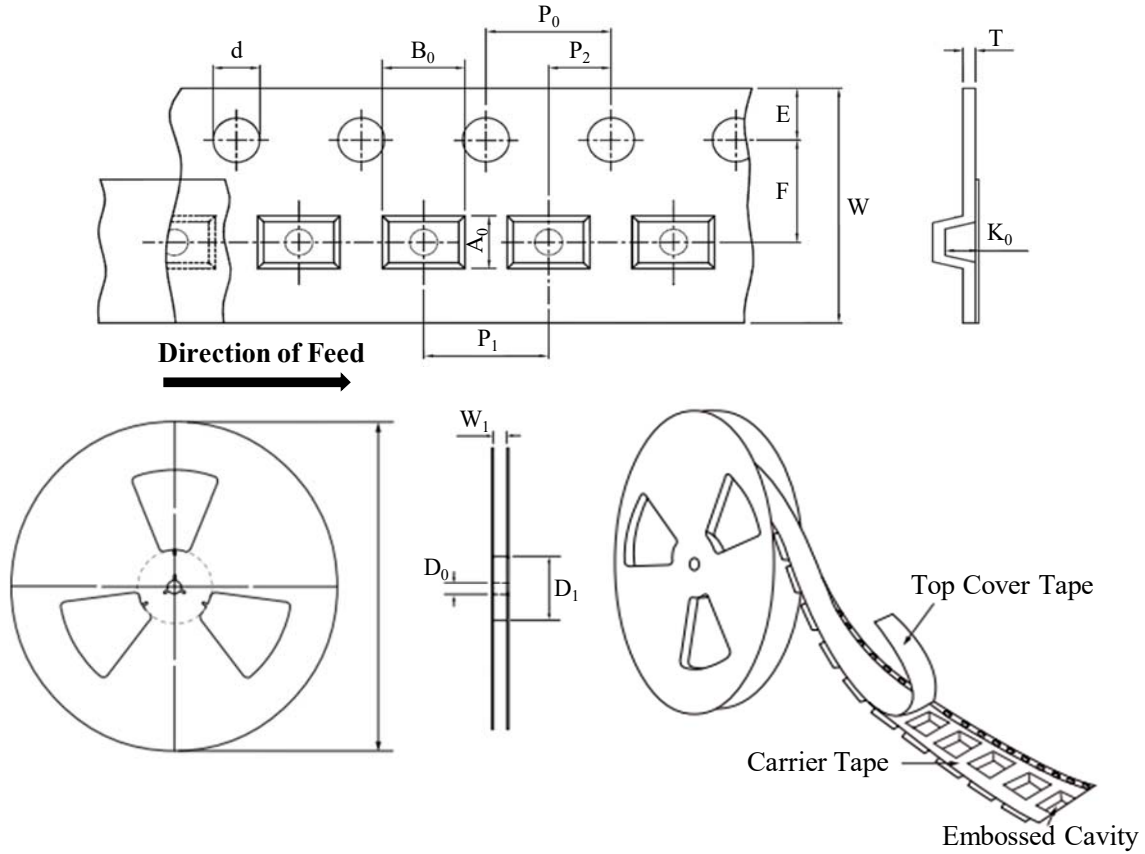
**Fig. 4-FORWARD CURRENT DERATING CURVE**



# ABAS70 SERIES

## SCHOTTKY BARRIER DIODES

### TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A <sub>0</sub>	3.30 ± 0.10
Carrier length	B <sub>0</sub>	3.00 ± 0.10
Carrier depth	K <sub>0</sub>	1.70 ± 0.10
Sprocket hole	d	1.60 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D <sub>0</sub>	13.00 ± 0.50
Reel inner diameter	D <sub>1</sub>	MIN. 50.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P <sub>0</sub>	4.00 ± 0.10
Punch hole pitch	P <sub>1</sub>	4.00 ± 0.10
Embossment center	P <sub>2</sub>	2.00 ± 0.10
Overall tape thickness	T	0.20 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W <sub>1</sub>	MAX. 14.50

### ORDER INFORMATION

Package	Reel Size	Quantity
SOT-23	7"	3,000

### MARKING CODE

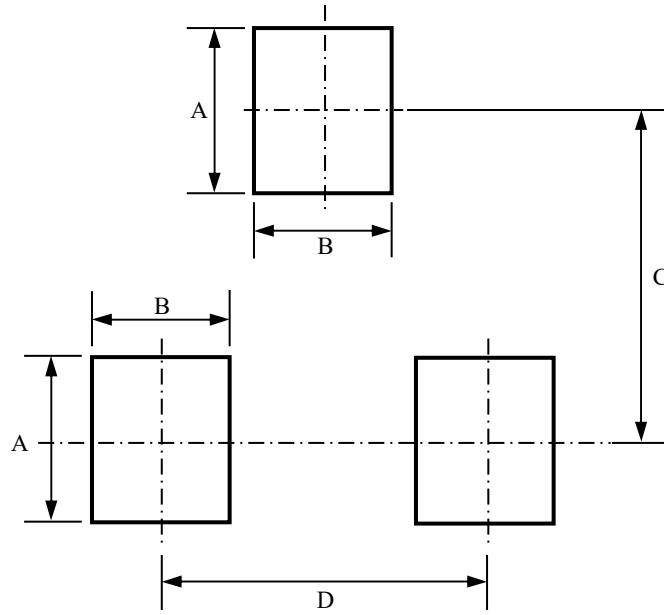
Part Number	Marking Code
ABAS70H	73
ABAS70-04H	74
ABAS70-05H	75
ABAS70-06H	76



# ABAS70 SERIES

## SCHOTTKY BARRIER DIODES

### SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOT-23	1.00	0.80	2.00	1.90