

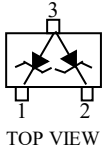


# AMMBZ5V6CAH THRU AMMBZ33CAH

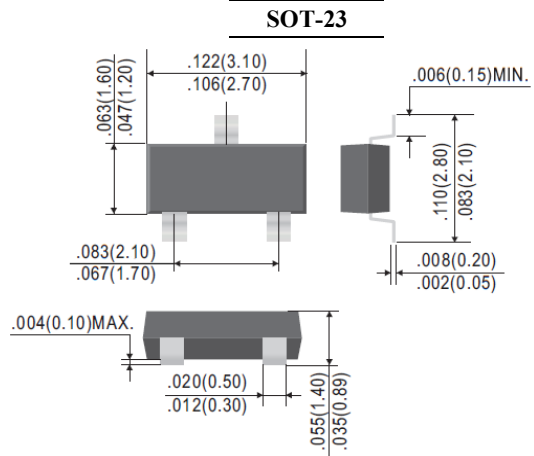
## ZENER DIODES

### FEATURES

- AEC-Q101 Qualified
- Zener Voltage Range : 5.6V to 33V
- Suffix "H" indicates Halogen-free parts, ex. AMMBZ5V6CAH



1. Cathode 2. Cathode 3. Anode



Dimensions in inches and (millimeters)

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

Parameter	Symbol	Value	Unit
Peak Power Dissipation (1 ms) (Note 1)	$P_{PK}$	24 40	W
Maximum Forward Voltage at $I_F=10\text{mA}$	$V_F$	0.9	V
Total Power Dissipation	$P_D$	225	mW
Thermal Resistance from Junction to Ambient (Note 2)	$R_{\theta JA}$	556	$^\circ\text{C} / \text{W}$
Junction and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$

- Note :
1. Non-repetitive current pulse waveform per figure 6.
  2. Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.



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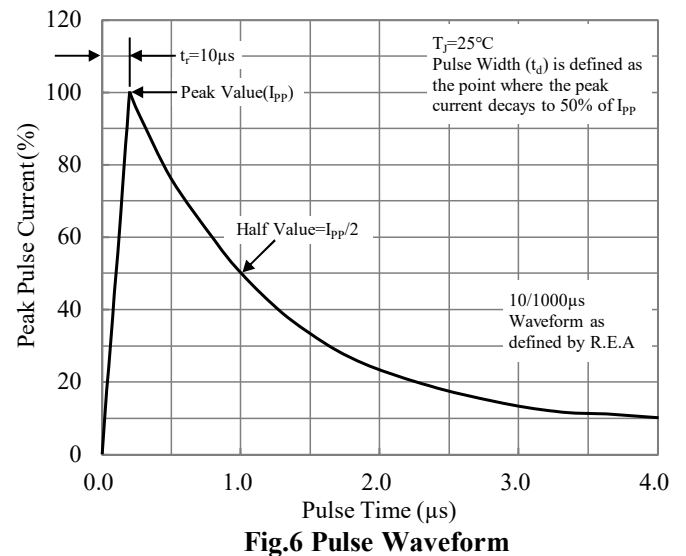
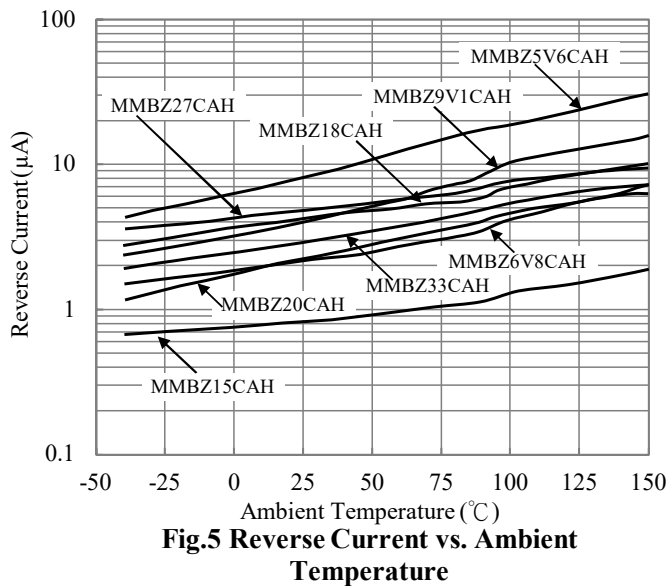
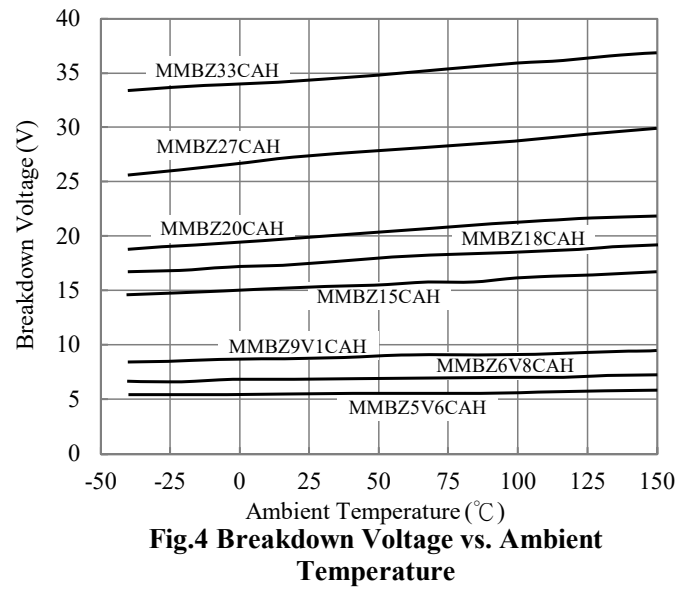
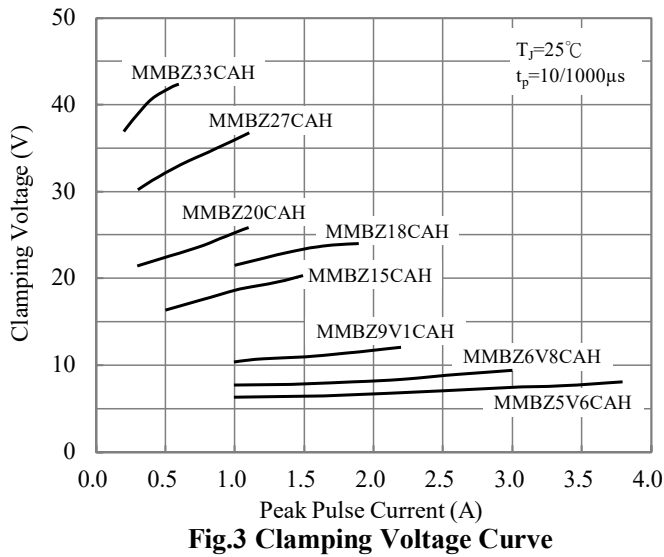
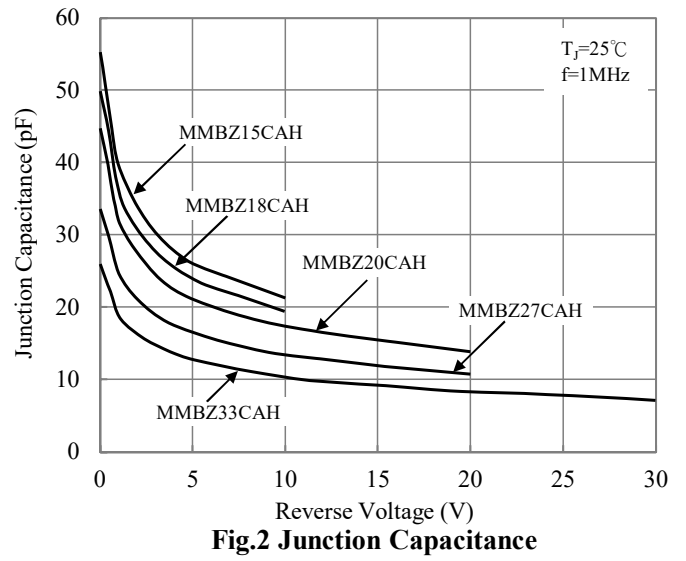
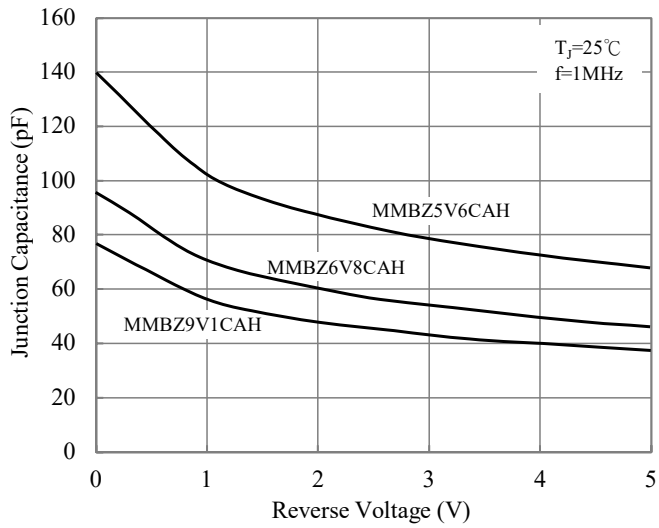
### ELECTRICAL CHARACTERISTICS

Device	Marking Code	Reverse Stand-off Voltage	Reverse Current	Breakdown Voltage			Clamping Voltage		Typical Temperature Coefficient
		$V_{RWM}$	$I_R$ at $V_{RWM}$	$V_{BR}$		at $I_T$	$V_C$	at $I_{PP}$	$T_C$
		(V)	Max. ( $\mu$ A)	Min. (V)	Max. (V)	(mA)	Max. (V)	(A)	(mV / °C)
AMMBZ5V6CAH	1U	3.0	5.00	5.32	5.88	20	8.0	3.00	1.26
AMMBZ6V2CAH	2U	3.0	0.50	5.89	6.51	1	8.7	2.76	2.80
AMMBZ6V8CAH	3U	4.5	0.50	6.46	7.14	1	9.6	2.50	3.40
AMMBZ9V1CAH	4U	6.0	0.30	8.60	9.56	1	14.0	1.70	7.50
AMMBZ10CAH	5U	6.5	0.30	9.50	10.50	1	14.2	1.70	7.50
AMMBZ12CAH	6U	8.5	0.20	11.40	12.60	1	17.0	2.35	7.50
AMMBZ15CAH	7U	12.0	0.05	14.00	15.75	1	21.0	1.90	12.30
AMMBZ18CAH	8U	14.5	0.05	17.10	18.90	1	25.0	1.60	15.30
AMMBZ20CAH	9U	17.0	0.05	19.00	21.00	1	28.0	1.40	17.20
AMMBZ27CAH	0U	22.0	0.05	25.65	28.35	1	40.0	1.00	24.30
AMMBZ33CAH	U1	26.0	0.05	31.35	34.65	1	46.0	0.87	30.40



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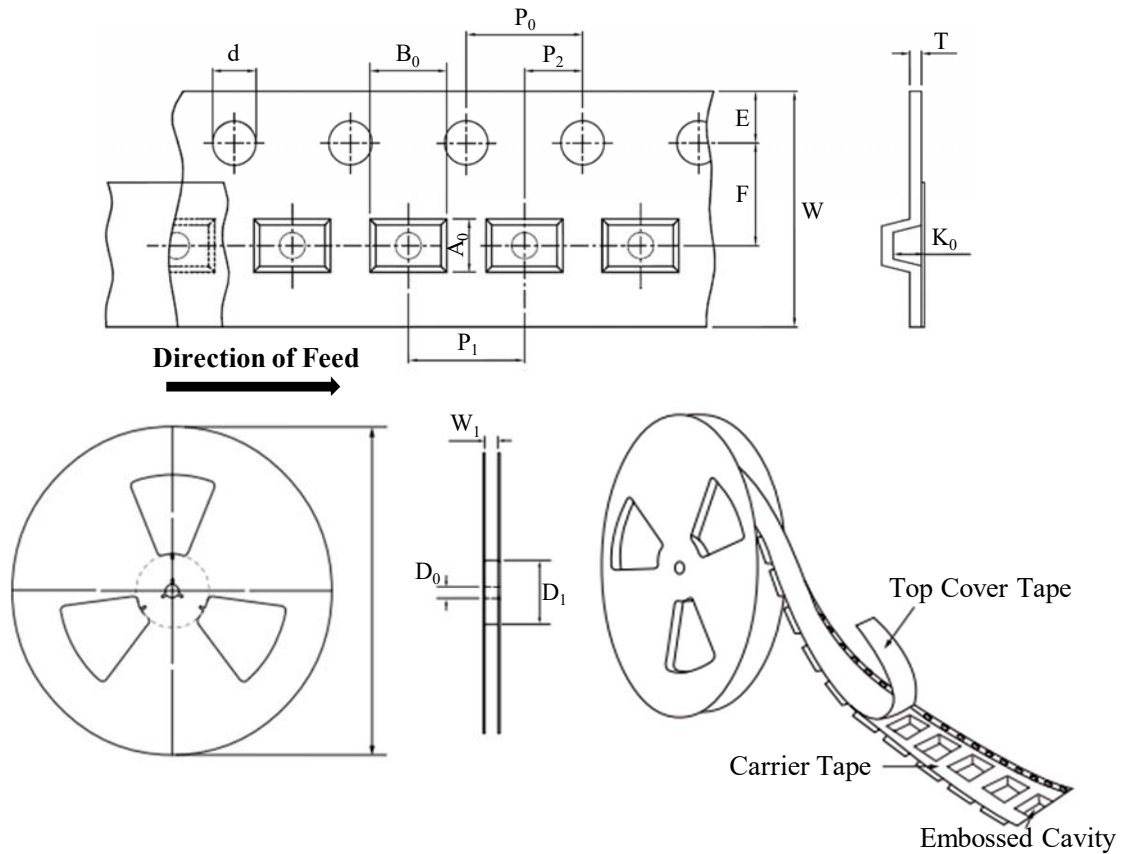
## RATINGS AND CHARACTERISTIC CURVES





# AMMBZ5V6CAH THRU AMMBZ33CAH ZENER 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	1.50 ± 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

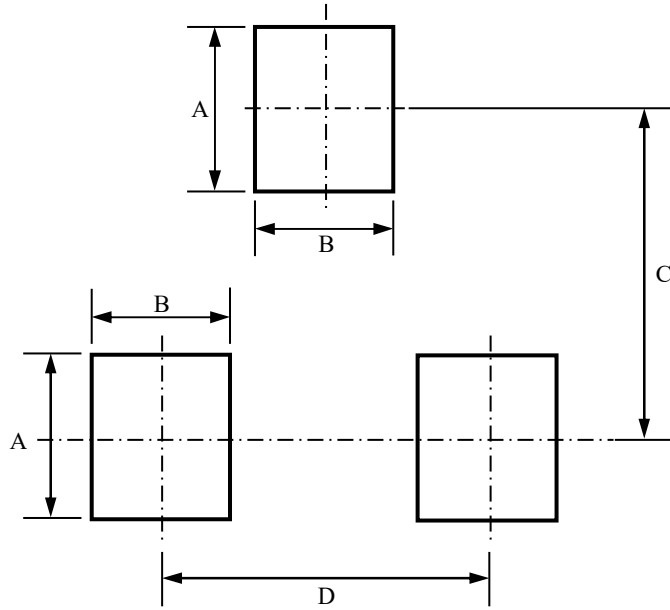
## ORDER INFORMATION

Package	Reel Size	Quantity
SOT-23	7"	3000



# AMMBZ5V6CAH THRU AMMBZ33CAH ZENER DIODES

## SUGGESTED SOLDER PAD LAYOUT



Unit :mm

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