



# SE05S6BMI

## ESD PROTECTION DIODE

### FEATURES

- IEC61000-4-2(ESD) 15kV(air), 8kV(Contact)
- Protects one bidirectional line or two unidirectional lines
- Low Clamping Voltage
- Low leakage current
- Working Voltage 5V
- Suffix " H " indicated Halogen-free part, ex.SE05S6BMIH

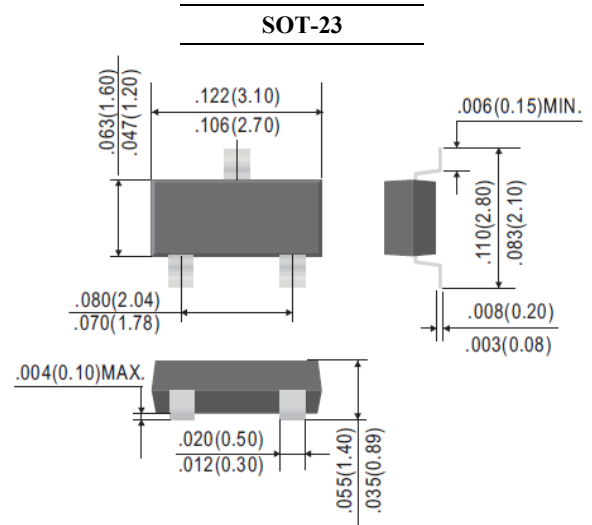
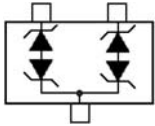
### APPLICATIONS

- Data line protect
- Industrial Controls
- Computers, NB and Peripherals
- Set-Top Box
- Projection TV
- Audio and video equipment

### MECHANICAL DATA

Case : SOT-23

### PIN CONFIGURATION



**Dimensions in inches and (millimeters)**

### Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

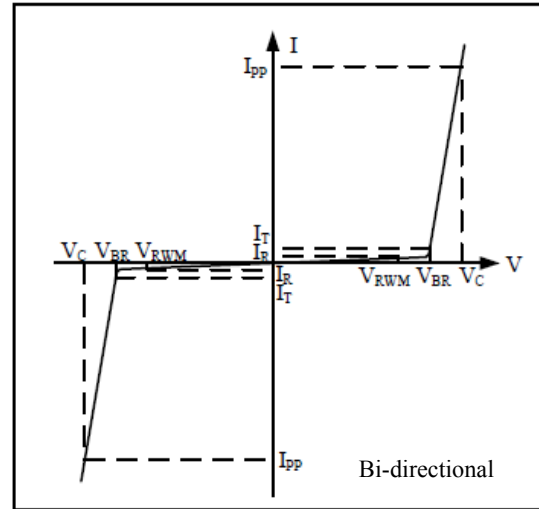
Parameter	Symbol	Value	Units
Peak Pulse Power (tp = 8/20μs)	P <sub>pp</sub>	350	W
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	15	kV
ESD per IEC 61000-4-2 (Contact)		8	
Operating Temperature Range	T <sub>STG</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>J</sub>	-55 to +150	°C



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Symbol	Parameter
$V_{RWM}$	Nominal Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Reverse Breakdown Voltage @ $I_T$
$I_T$	Test Current for Reverse Breakdown
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Maximum Peak Pulse Current
$V_R$	Reverse Voltage
$C_j$	Capacitance



Electrical Characteristics Per line @ 25°C Unless Otherwise Specified

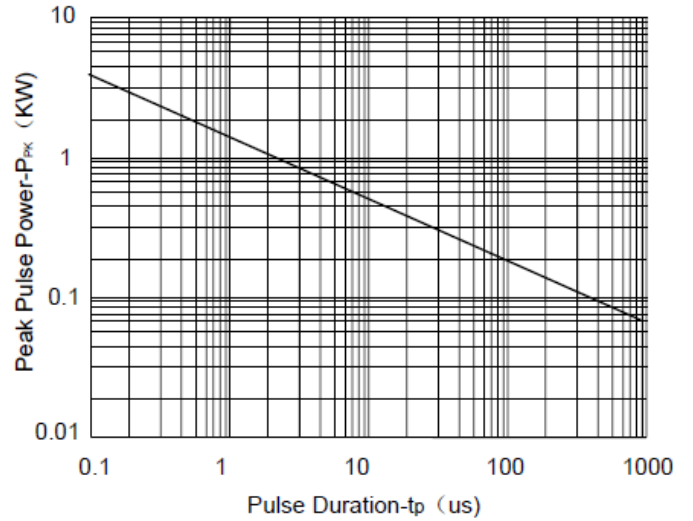
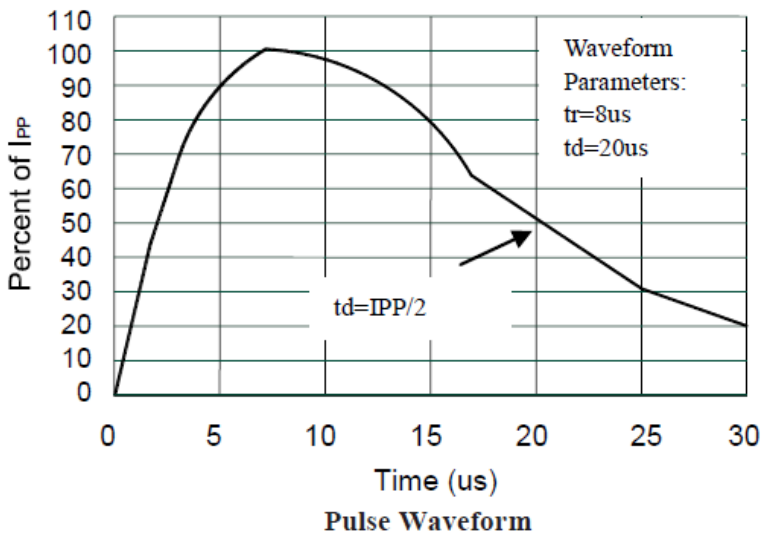
Part Numbers	$V_{RWM}$	$I_R$ @ $V_{RWM}$	$V_{BR}$	$I_T$	$V_C$ @ $I_{PP}=1A$	$I_{PP}$ @8/20 $\mu S$	$C_j$ @ $V_R=0V, 1MHz$	
	(V)	( $\mu A$ )	Min.(V)	(mA)	(V)	Max.(A)	Typ.(pF)	Max.(pF)
SE05S6BMI	5.0	1.0	6.0	1.0	9.8	3.0	4.5	6.0



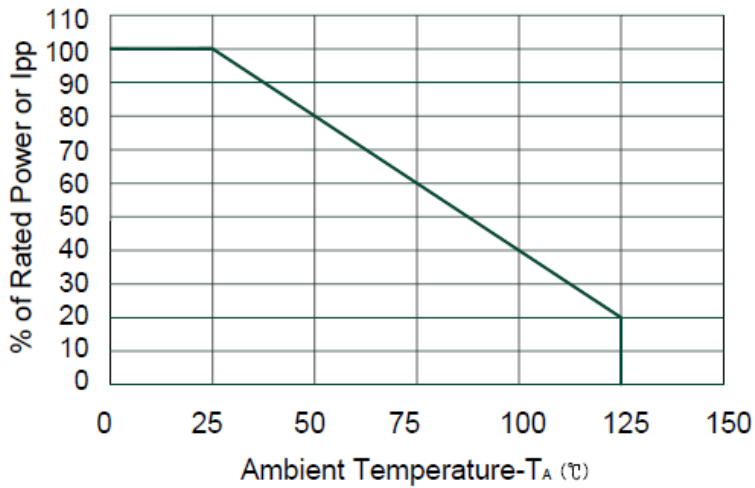
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### RATINGS AND CHARACTERISTIC CURVES



Non-Repetitive Peak Pulse Power vs. Pulse Time

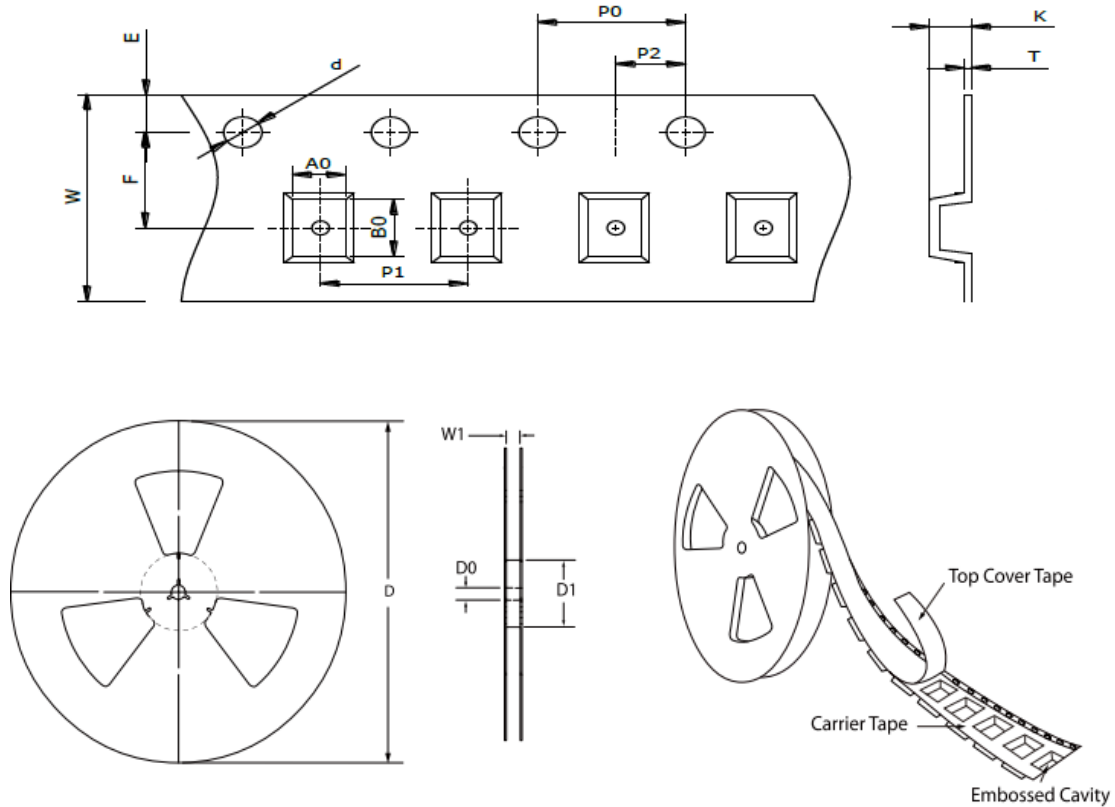




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### TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A <sub>0</sub>	3.10 ± 0.10
Carrier length	B <sub>0</sub>	2.70 ± 0.10
Carrier depth	K	1.15 ± 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 ± 0.20
Reel inner diameter	D <sub>1</sub>	MIN. 54.00
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. 13.50

### ORDER INFORMATION

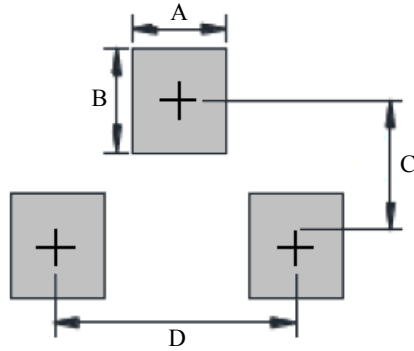
Package	Reel Size	Quantity
SOT-23	7"	3,000



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### SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D
SOT-23	0.80	0.80	2.02	1.90