



SE05Q40UDIH

ESD PROTECTION DIODE

FEATURES

- IEC61000-4-2(ESD) 30kV(Contact)
- Low Clamping Voltage
- Low leakage current
- Working Voltage 5V
- Suffix " H " indicated Halogen-free part, ex.SE05Q40UDIH

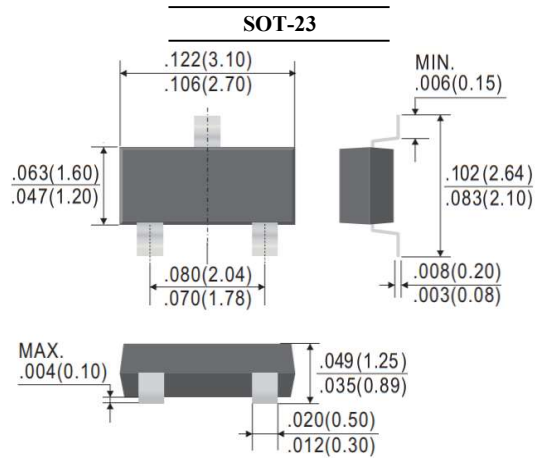
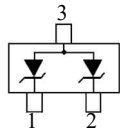
APPLICATIONS

- Communication systems
- Medical equipment
- Notebook

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 ($t_p=8/20\mu s$)	P_{PP}	350	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	24	A
ESD per IEC 61000-4-2	Air	30	kV
	Contact	30	
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C



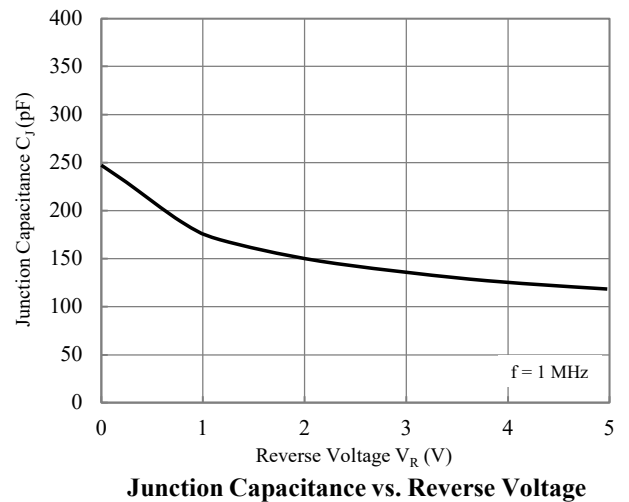
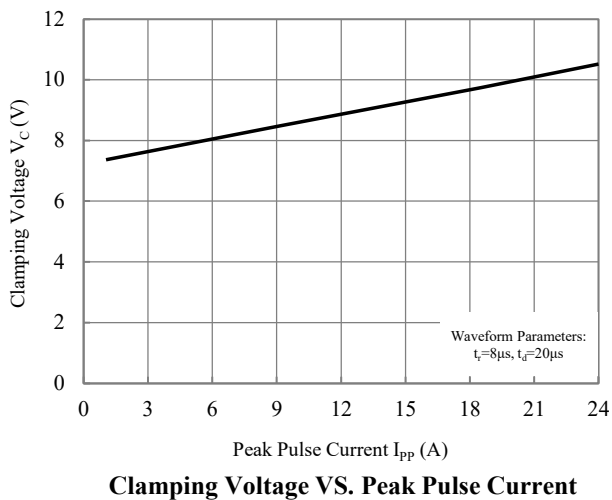
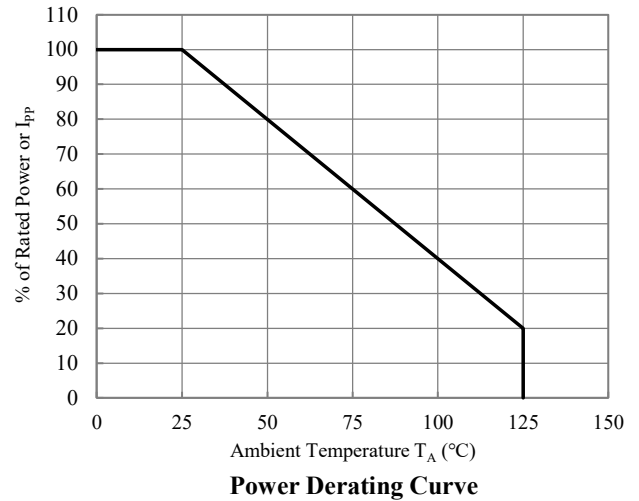
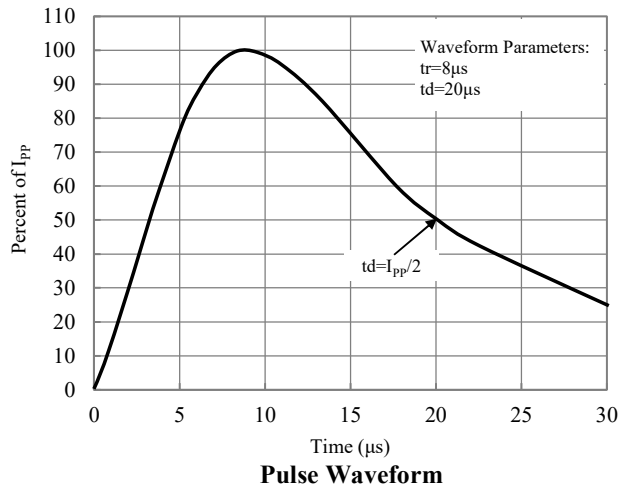
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Electrical Characteristics Per line at 25°C Unless Otherwise Specified

Parameter	Test Condition	Symbol	Min	Typ.	Max	Units
Reverse Working Voltage	-	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage	$I_R=1\text{mA}$	$V_{(BR)}$	6	-	-	V
Reverse Leakage Current	$V_{RWM}=5\text{V}$	I_R	-	-	20	μA
Clamping Voltage	$I_{pp}=24\text{A}$, $t_p=8/20\mu\text{s}$	V_C	-	-	14.5	V
Junction Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$, Pin 1 to Pin 3 and Pin 2 to Pin 3	C_J	-	-	400	pF

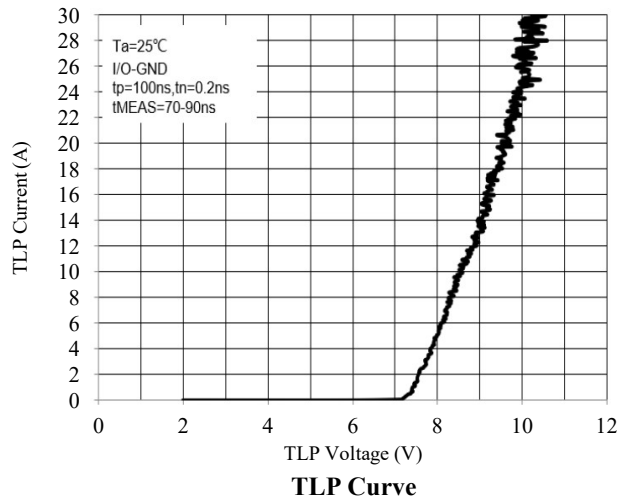
RATINGS AND CHARACTERISTIC CURVES





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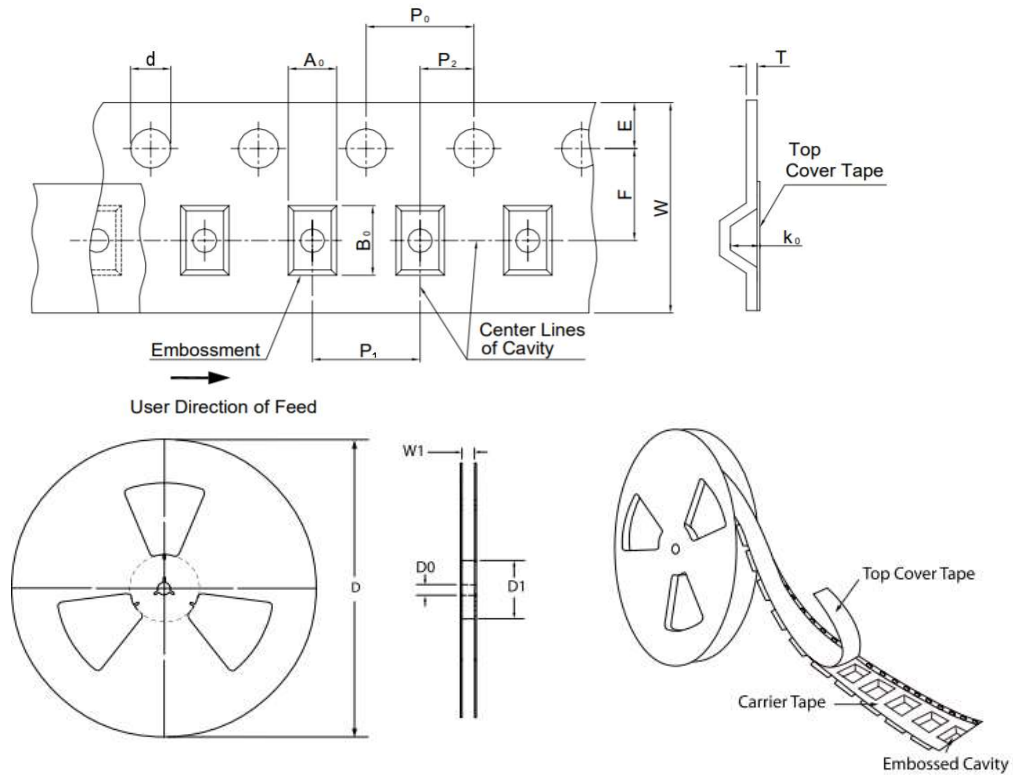




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TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A ₀	3.30 ± 0.10
Carrier length	B ₀	2.90 ± 0.10
Carrier depth	K	1.45 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	13.00 ± 0.50
Reel inner diameter	D ₁	MIN. 54.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	MAX. 0.60
Tape width	W	8.00 ± 0.30
Reel width	W1	MAX. 10.00

ORDER INFORMATION

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

MARKING CODE

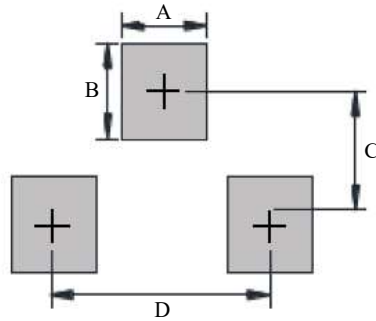
Part Number	Marking Code
SE05Q40UDIH	5HA



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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