SE24Q6UDIH
ESD PROTECTION DIODE

FEATURES

· Low Clamping Voltage

· Low leakage current

· Working Voltage 24V

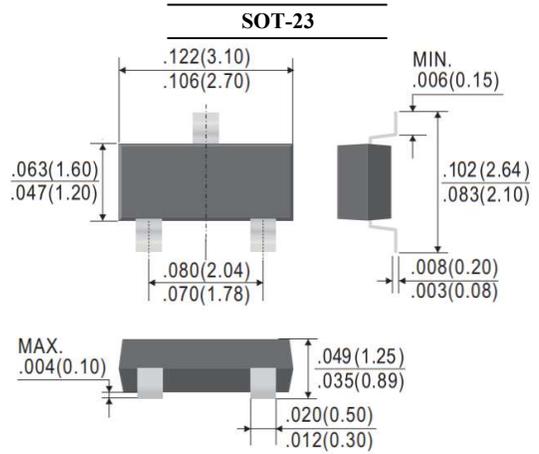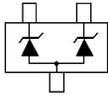· Suffix " H " indicated Halogen-free part, ex.SE24Q6UDIH

SOT-23

.122(3.10)
.106(2.70)

MIN.
.006(0.15)

.063(1.60)
.047(1.20)

.102(2.64)
.083(2.10)

.080(2.04)
.070(1.78)

.008(0.20)
.003(0.08)

MAX.
.004(0.10)

.049(1.25)
.035(0.89)

.020(0.50)
.012(0.30)

Dimensions in inchs and (millimeters)

APPLICATIONS

· CAN bus protection

· Automotive applications

MECHANICAL DATA

Case : SOT-23

PIN CONFIGURATION

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

| Parameter		Symbol	Value	Units
Peak Pulse Power (t_p = 8/20µs)		P_{PP}	300	W
Peak Pulse Current (t_p=8/20µs)		I_{PP}	5	A
ESD per IEC 61000-4-2	Air	V_{ESD}	±15	kV
	Contact		±8	
Operating Temperature Range		T_J	-55 to +150	℃
Storage Temperature Range		T_{STG}	-55 to +150	℃

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Electrical Characteristics Per line at 25°C Unless Otherwise Specified

Parameter	Test Condition	Symbol	Min	Typ.	Max	Units
Reverse Stand-Off Voltage	-	V_{RWM}	-	-	24.0	V
Reverse Breakdown Voltage	I_T=1mA	$V_{(BR)}$	26.7	-	-	V
Reverse Leakage Current	V_{RWM}=24V	I_R	-	-	1	μA
Clamping Voltage	I_{PP}=1A	V_C	-	-	43	V
	I_{PP}=5A		-	-	60	
Capacitance	V_R=0V, f=1MH$_Z$	C_J	-	-	63	pF

RATINGS AND CHARACTERISTIC CURVES

Pulse Waveform

Non-Repetitive Peak Pulse Power vs. Pulse Time
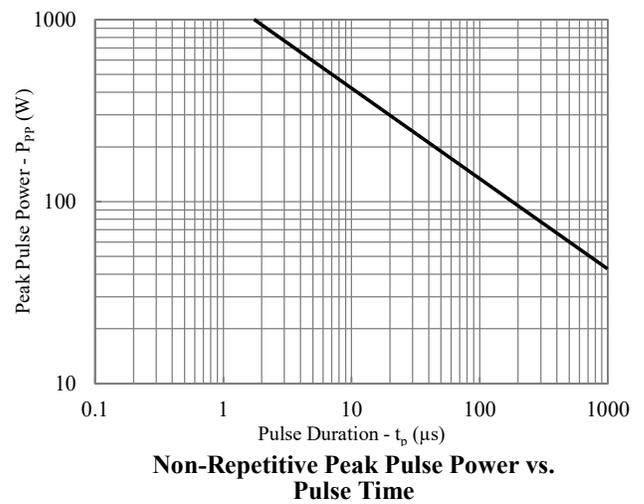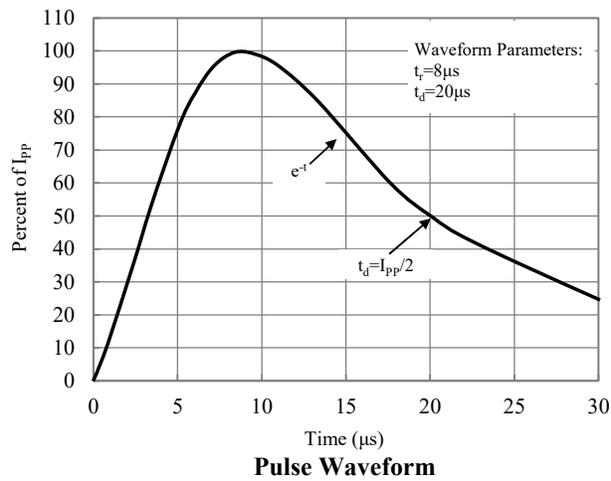
SE24Q6UDIH
ESD PROTECTION DIODE

TAPE & REEL SPECIFICATION
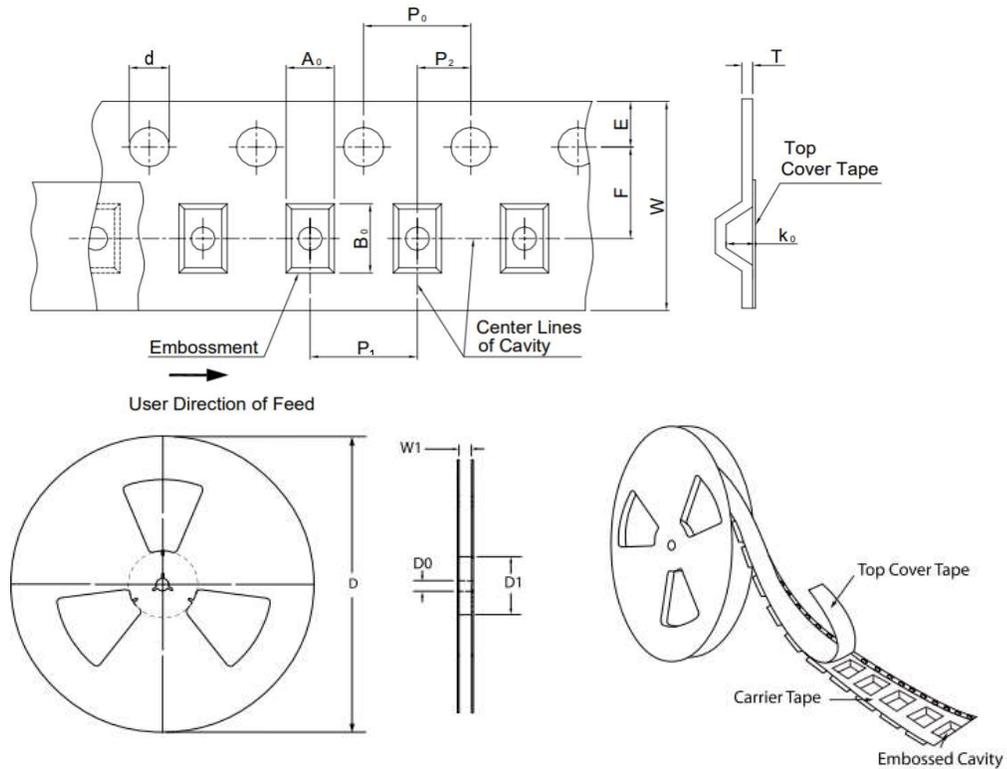
Item	Symbol	SOT-23
Carrier width	A_0	3.30 ± 0.10
Carrier length	B_0	2.90 ± 0.10
Carrier depth	K	1.45 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D_0	13.00 ± 0.50
Reel inner diameter	D_1	MIN. 54.00
Sprocke hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocke 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
SE24Q6UDIH	24C

SUGGESTED SOLDER PAD LAYOUT
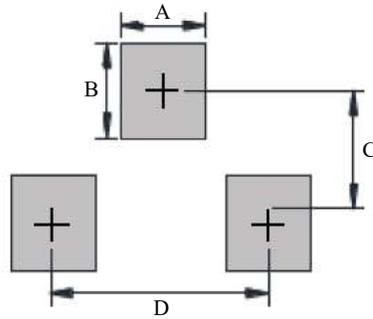
Unit : mm

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