

Part Number	Device Specifications (at 25°C)										Life Ratings	
	DC Breakdown in Volts (@100V/s)			Impulse Breakdown in Volts (@100V/μs)	Impulse Breakdown In Volts (@1 Kv/μsec)	Insulation Resistance	Capacitance (@1MHz)	Arc Voltage (@1A)	Glow to Arc Transition Current	Glow Voltage	Nominal Impulse Discharge Current (x10 @8/20μs)	Nominal Impulse Discharge Current (x10 @5/320μs)
	MIN	TY	MAX	MAX		MIN	MAX					
	SE140	98	140	182	800	900	>1GΩ (at 100VDC)	<0.5 pf	~10 V	<1.0 A	~60 V	0.5 kA
SE200	140	200	260	700	1100	<0.3 pf		<1.0 A				
SE230	172	230	276	600	800	<0.5 pf		<1.0 A				
SE350	265	350	495	900	1150	<0.5 pf		<1.0 A				
SE470	329	470	611	1050	1200	<0.3 pf		<1.0 A		0.5 kA		
SE500	400	500	600	1050	1200	<0.3 pf		<1.0 A		0.5 kA		

Materials	Device Tin Plated 17.5±12.5 Microns Construction Ceramic Insulator.
Storage and Operational Temperature	-40 to +90 °C

The graph shows the voltage across a thyristor as it transitions from the off-state to the on-state. The x-axis represents time in nanoseconds (ns) from 0 to 1200, and the y-axis represents voltage in Volts (V) from 0 to 100. The curve starts at (0,0), rises to a peak labeled 'Max dynamic breakover voltage' at approximately 500 ns and 90 V. It then drops to a plateau labeled 'Hold-over voltage' at approximately 50 V, which then settles to a steady-state value labeled 'On-State voltage' at approximately 10 V.

Time (ns)	Voltage (V)	Feature
0	0	Start of turn-on
200	25	Rising edge
400	75	Rising edge
500	90	Max dynamic breakover voltage
600	50	Hold-over voltage
800	10	On-State voltage
1000	10	On-State voltage
1200	10	On-State voltage

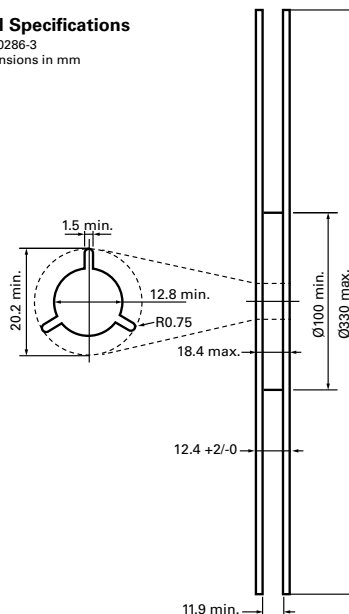
Tape Specifications

IEC 60286-3
Dimensions in mm

The drawing includes the following details:

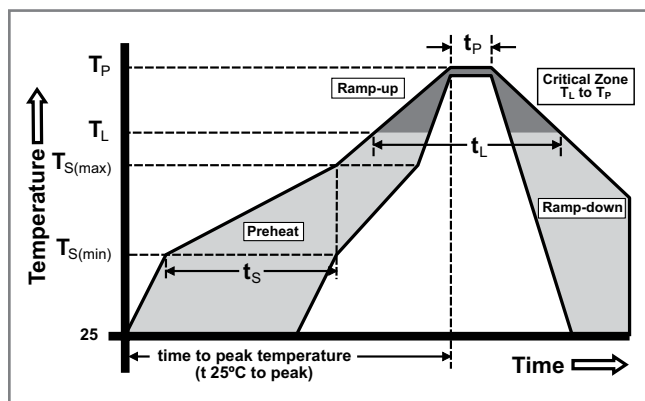
- Section A-A:** Shows a cross-section of the tape with a thickness of 0.4 ± 0.05 mm and a lead angle of 5° . The lead height is 3.7 ± 0.1 mm and the lead width is 1.9 ± 0.1 mm.
- Section B-B:** Shows a cross-section of the tape with a width of 2.1 ± 0.1 mm and a lead angle of 5° .
- Main View:** Shows the tape with dimensions: 12 ± 0.3 mm (total length), 5.6 ± 0.1 mm (distance from lead to first pocket), 1.75 ± 0.1 mm (pocket width), 2 ± 0.1 mm (pocket pitch), 4 ± 0.1 mm (pocket pitch), and 1.5 ± 0.05 mm (pocket width). The hole diameter is $\varnothing 1.1 \pm 0.1$ mm. The distance between the last pocket and the end is 4 ± 0.1 mm.
- Labels:** 'A' and 'B' indicate the locations of Section A-A and Section B-B respectively.
- Text:** 'SMD-Tape has to withstand a minimum Force of $F > 20$ N / pocket 2 Kg / pocket minimum vertical load (minimum checking quantity: 10 pockets)'. An arrow points to a detail of the tape being tested under vertical load.

IEC 60286-3
Dimensions in mm

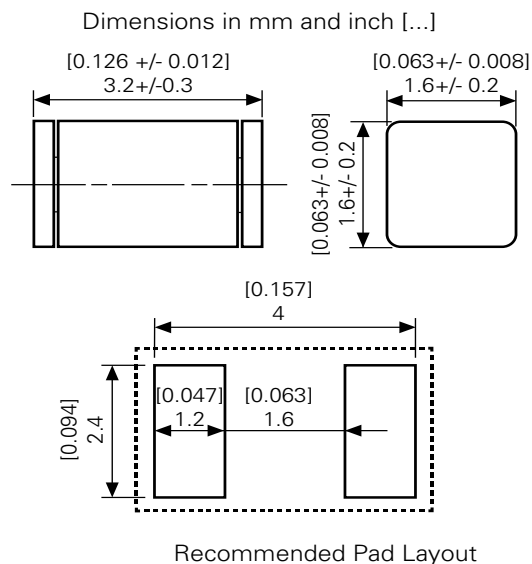


Soldering Parameters - Reflow Soldering (Surface Mount Devices)

Reflow Condition		Pb – Free assembly
Pre Heat	- Temperature Min ($T_{s(min)}$)	150°C
	- Temperature Max ($T_{s(max)}$)	200°C
	- Time (Min to Max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		5°C/second max
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260 ^{+0/-5} °C
Time within 5°C of actual peak Temperature (t_p)		10 – 30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C



Device Dimensions



Part Numbering System and Ordering Information

SE xxx

Series ———

1206 Square GDT

Breakdown Voltage ———

140 = 140V
200 = 200V
230 = 230V
350 = 350V
470 = 470V
500 = 500V

Packaging

Part Number	Packaging Option	Quantity
SE140	Tape and Reel	3,000
SE200	Tape and Reel	3,000
SE230	Tape and Reel	3,000
SE350	Tape and Reel	3,000
SE470	Tape and Reel	3,000
SE500	Tape and Reel	3,000