

DO-160 Section 22 Lightning Induced Transient Susceptability

Waveforms

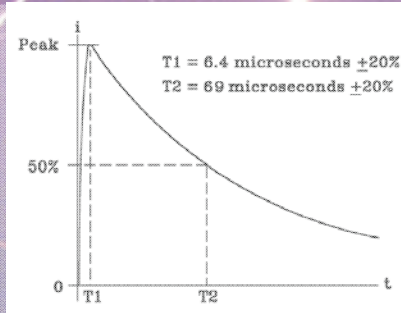


Figure 22-2 Current Waveform 1

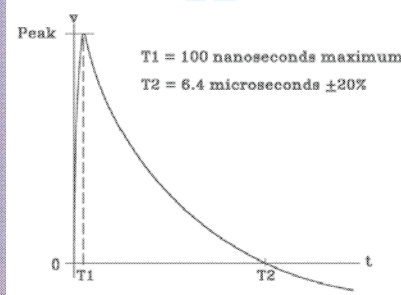


Figure 22-3 Voltage Waveform 2

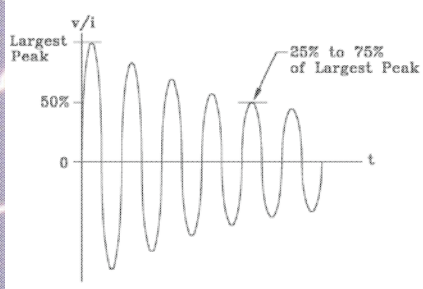


Figure 22-4 Voltage/Current Waveform 3

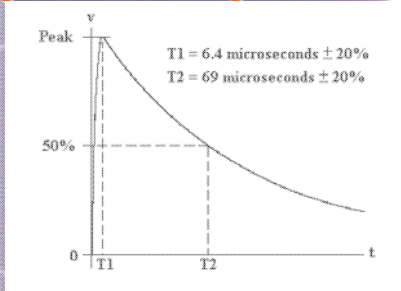


Figure 22-5 Voltage Waveform 4

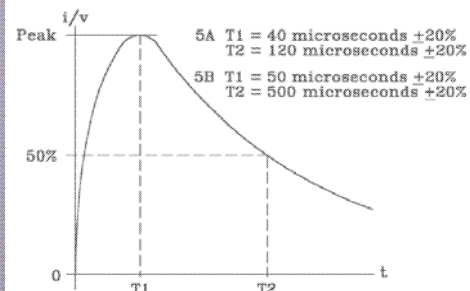


Figure 22-6 Current/Voltage Waveform 5



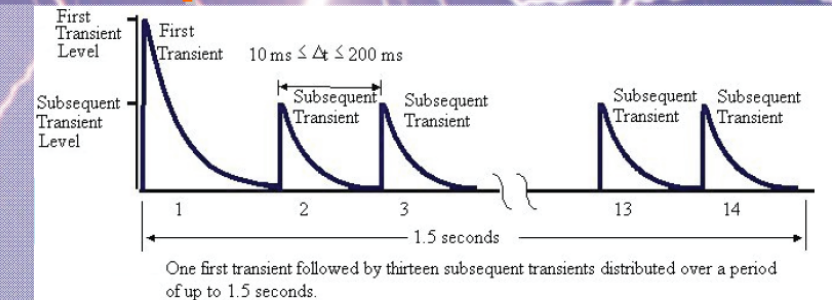
W1: Cable Bundle SS		
Level	Voc	Isc
1	100	4
2	250	10
3	600	24
4	1500	60
5	3200	128

W1: Cable Bundle MS				
	First Stroke		Subsequent Strokes	
Level	V _{Limit}	I _{Test}	V _{Limit}	I _{Test}
1	50	50	25	25
2	125	125	62.5	62.5
3	300	300	150	150
4	750	750	375	375
5	1600	1600	800	800

W2: Cable Bundle SS		
Level	Voc	Isc
1	100	4
2	250	10
3	600	24
4	1500	60
5	3200	128

W2: Cable Bundle MS				
	First Stroke		Subsequent Strokes	
Level	V _{Limit}	I _{Test}	V _{Limit}	I _{Test}
1	50	50	25	25
2	125	125	62.5	62.5
3	300	300	150	150
4	750	750	375	375
5	1600	1600	800	800

Multiple Stroke Definition



W3: Pin Injection		
Level	Voc	Isc
1	100	4
2	250	10
3	600	24
4	1500	60
5	3200	128

W3: Cable Bundle SS		
Level	Voc	Isc
1	100	20
2	250	50
3	600	120
4	1500	300
5	3200	640

W3: Cable Bundle MS				
	First Stroke		Subsequent Strokes	
Level	V _{Limit}	I _{Test}	V _{Limit}	I _{Test}
1	100	20	50	10
2	250	50	125	25
3	600	120	300	60
4	1500	300	705	150
5	3200	640	1600	320

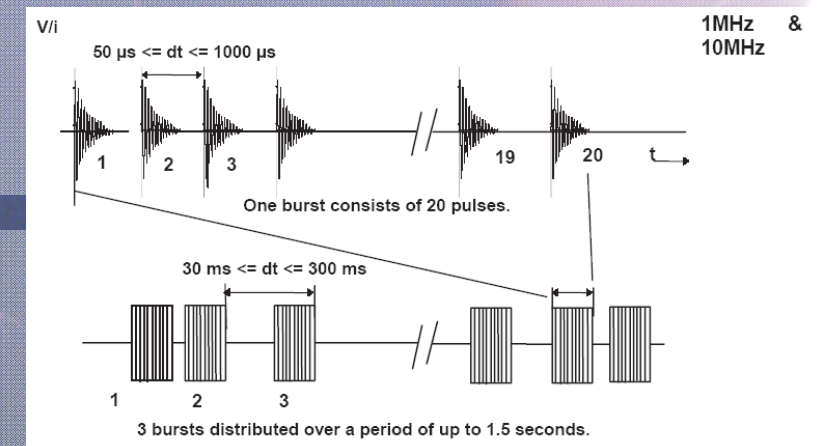
Cable Bundle MB				
	W3H		W6H	
Level	V _{Test}	I _{Limit}	V _{Limit}	I _{Test}
1	60	1	70	5
2	150	2.5	180	12.5
3	360	6	430	30
4	900	15	1080	75
5	1920	32	2290	160

W4: Pin Injection		
Level	Voc	Isc
1	50	10
2	125	25
3	300	60
4	750	150
5	1600	320

W4: Cable Bundle SS		
Level	Voc	Isc
1	50	100
2	125	250
3	300	600
4	750	1500
5	1600	3200

W4: Cable Bundle MS				
	First Stroke		Subsequent Strokes	
Level	V _{Limit}	I _{Test}	V _{Limit}	I _{Test}
1	25	50	12.5	25
2	62.5	125	31.25	62.5
3	150	300	75	150
4	375	750	187.5	375
5	800	1600	400	800

Multiple Burst Definition



W5A: Pin Injection		
Level	Voc	Isc
1	50	50
2	125	125
3	300	300
4	750	750
5	1600	1600

W5A & 5B: Cable Bundle SS		
Level	Voc	Isc
1	50	150
2	125	400
3	300	1000
4	750	2000
5	1600	5000

W5A & 5B: Cable Bundle MS				
	First Stroke		Subsequent Strokes	
Level	V _{Limit}	I _{Test}	V _{Limit}	I _{Test}
1	20	60	10	30
2	50	160	25	80
3	120	400	60	200
4	300	800	150	400
5	640	2000	320	1000