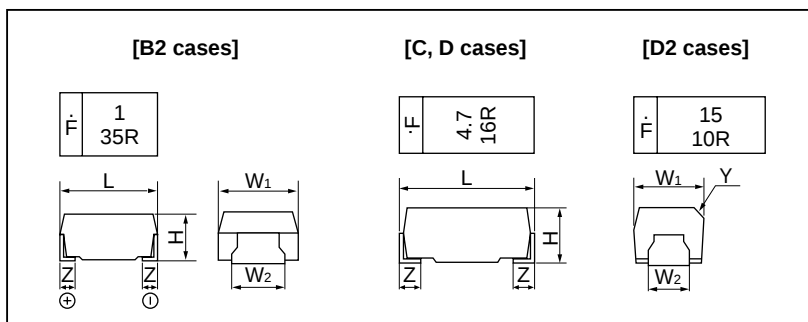


SV/F Series Tantalum Chip Capacitors (Fuse Built-in Type)

DIMENSIONS [mm]



(Unit: mm)

Case Code	EIA code	L	W ₁	W ₂	H	Z	Y
B2	3528	3.5 ± 0.2	2.8 ± 0.2	2.3 ± 0.1	1.9 ± 0.2	0.8 ± 0.2	–
C	6032	6.0 ± 0.2	3.2 ± 0.2	2.2 ± 0.1	2.5 ± 0.2	1.3 ± 0.2	0.4 C
D2	5846	5.8 ± 0.2	4.6 ± 0.2	2.4 ± 0.1	3.2 ± 0.2	1.3 ± 0.2	–
D	7343	7.3 ± 0.2	4.3 ± 0.2	2.4 ± 0.1	2.8 ± 0.2	1.3 ± 0.2	0.5 C

DC Rated Voltage (Vdc)	10	16	20	25	35	50
1					B2	C
1.5				B2		
2.2			B2		C	
3.3		B2		C		D2
4.7	B2	C	C		D2, D	
6.8		C		D2, D	D	
10		C	D2, D	D		
15	C, D2	D2, D	D			
22		D2, D	D			
33	D2, D	D				
47	D					

PERFORMANCE CHARACTERISTICS

Operating temperature range
–55 to +125°C with proper voltage derating as shown in the following table.

DC working voltage and surge voltage

Rated voltage	10	16	20	25	35	50	V
Working	at 85°C	10	16	20	25	35	50
	at 125°C	6.3	10	13	16	22	32
Surge	at 85°C	13	20	26	33	46	65

Capacitance (at 20°C, 120 Hz)

Range: 1 μF to 47 μF
Tolerance: ± 20%, ±10%

Capacitance change with temperature
Not to exceed –12% at –55°C, +12% at 85°C, and +15% at 125°C

Tangent of loss angle (at 20°C, 120 Hz)

1 μF to 4.7 μF: less than 0.04
6.8 μF to 47 μF: less than 0.06

DC leakage current (at 20°C)

0.01 C•V^{Note} μA or 0.5 μA, whichever is greater

Damp heat (90 to 95% RH at 40°C, 56 days (1344 h))

Capacitance change: ±5%
Tangent of loss angle: 150% of initial requirements
DC leakage current: initial requirements

Endurance (at 85°C, DC rated voltage, 2000 h)

Capacitance change: ±10%
Tangent of loss angle: initial requirements
DC leakage current: 125% of initial requirements

Resistance to soldering heat

(solder reflow at 260°C, 10 s.

or solder dip at 260°C, 5 s.)

Capacitance change: ±5%
Leakage current: initial requirements
Tangent of loss angle: initial requirements

Fuse blow-out characteristic

Blow-out time:

B2 case: 5 s Max. with 2 A applied

C case: 10 s Max. with 2 A applied

D2, D cases: 20 s Max. with 2 A applied

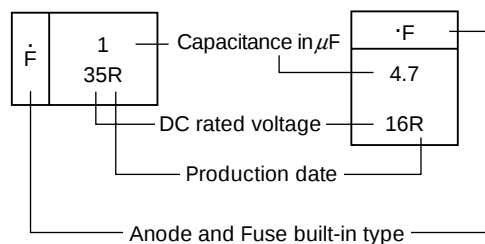
Note: Product of capacitance in μF and voltage in V.

See pages 25 and 26 for taping specifications.

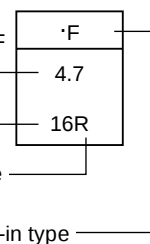
MARKINGS

The standard marking shows capacitance, DC rated voltage, polarity, and fuse built-in type.

[B2, D2 cases]



[C, D cases]



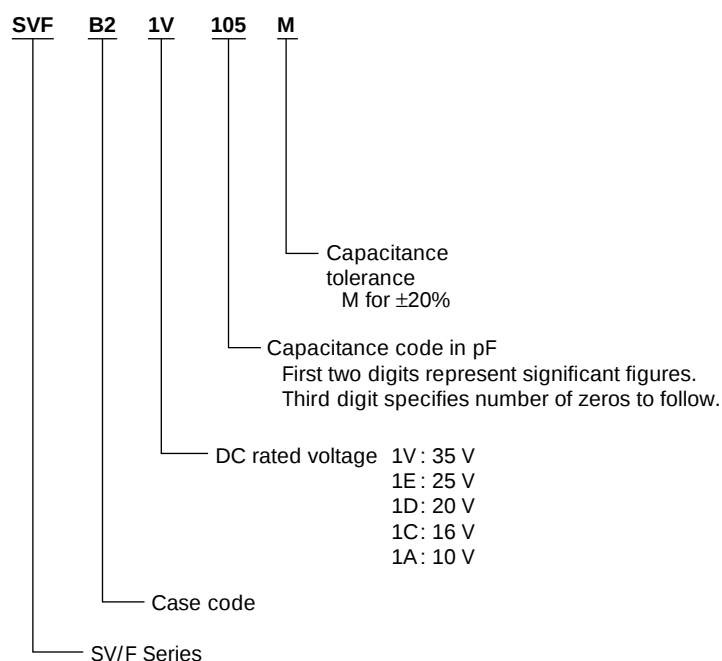
[Marking of production date code]

Y	M	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2001		A	B	C	D	E	F	G	H	J	K	L	M
2002		N	P	Q	R	S	T	U	V	W	X	Y	Z
2003		a	b	c	d	e	f	g	h	j	k	l	m
2004		n	p	q	r	s	t	u	v	w	x	y	z

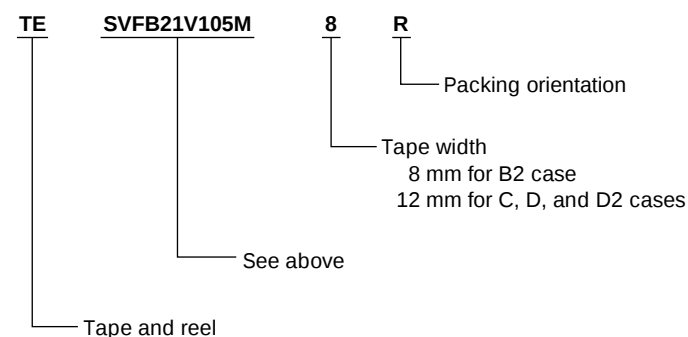
Note: Production date code will repeat beginning in 2005.

PART NUMBER SYSTEM

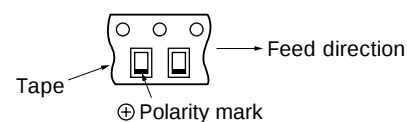
Bulk



Tape and Reel



R: Orientation



STANDARD RATINGS

Part Number	Capacitance (μF)	Case Code	DC Leakage Current (μA)	Tangent of Loss Angle
50 V Rating				
SVFC1H105M	1	C	0.5	0.04
SVFD21H335M	3.3	D2	1.7	0.04
35 V Rating				
SVFB21V105M	1	B2	0.5	0.04
SVFC1V225M	2.2	C	0.7	0.04
SVFD21V475M	4.7	D2	1.6	0.04
SVFD1V475M	4.7	D	1.6	0.04
SVFD1V685M	6.8	D	2.5	0.06
25 V Rating				
SVFB21E155M	1.5	B2	0.5	0.04
SVFC1E335M	3.3	C	0.8	0.04
SVFD21E685M	6.8	D2	1.7	0.06
SVFD1E685M	6.8	D	1.7	0.06
SVFD1E106M	10	D	2.5	0.06
20 V Rating				
SVFB21D225M	2.2	B2	0.5	0.04
SVFC1D475M	4.7	C	0.9	0.04
SVFD21D106M	10	D2	2.0	0.06
SVFD1D106M	10	D	2.0	0.06
SVFD1D156M	15	D	3.0	0.06
SVFD1D226M	22	D	4.4	0.06
16 V Rating				
SVFB21D335M	3.3	B2	0.5	0.04
SVFC1C475M	4.7	C	0.7	0.04
SVFC1C685M	6.8	C	1.0	0.06
SVFC1C106M	10	C	1.6	0.06
SVFD21C156M	15	D2	2.4	0.06
SVFD21C226M	22	D2	3.5	0.06
SVFD1C156M	15	D	2.4	0.06
SVFD1C226M	22	D	3.5	0.06
SVFD1C336M	33	D	5.3	0.06
10 V Rating				
SVFB21A475M	4.7	B2	0.5	0.04
SVFC1A156M	15	C	1.5	0.06
SVFD21A156M	15	D2	1.5	0.06
SVFD21A336M	33	D2	3.3	0.06
SVFD1A336M	33	D	3.3	0.06
SVFD1A476M	47	D	4.7	0.06

Note: Part numbers are for ±20% capacitance tolerance.