

New series 

**Construction**

- Polar niobium capacitors with solid electrolyte
- Niobium manganese dioxide technology (Nb-MnO<sub>2</sub>)
- Flame-retardant plastic case (UL 94 V-0)
- Tinned terminals



**Features**

- High volumetric efficiency
- Excellent solderability
- Stable temperature and frequency characteristics
- Low leakage current, low dissipation factor
- Low self-inductance
- High resistance to shock and vibration
- Suitable for use without series resistor  
(recommended operating voltage see "General Technical Information", page 111, 4.4)

**Applications**

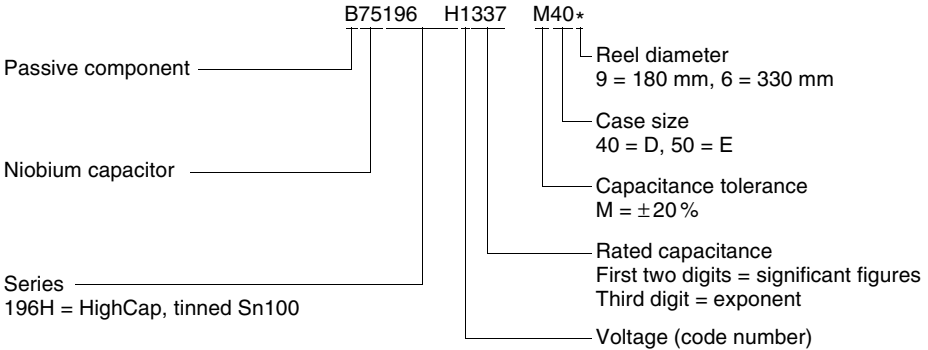
- Telecommunications (e.g. mobile phones, private branch exchanges, PDA)
- Data processing (e.g. laptops, main frames)
- Measuring and control engineering
- Medical engineering
- DC/DC converters

**Soldering**

Suitable for reflow soldering (IR and vapor phase) and wave soldering

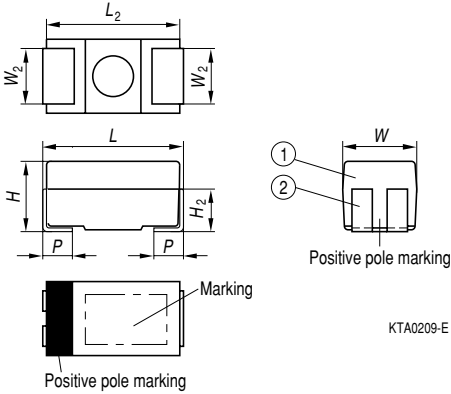
**Delivery mode**

Taped and reeled in accordance with IEC 60286-3

**Ordering code structure**

**Specifications and characteristics in brief**

For characteristic curves see “General Technical Information”, page 107 ff.

	HighCap
Series	B75196H
Technology	Nb-MnO <sub>2</sub>
Terminals	Tinned
Rated voltage $V_R$ (up to 85 °C)	4 ... 10 Vdc
Rated capacitance $C_R$	100 ... 1000 µF
Capacitance tolerance	±20%
Operating temperature	-55 ... +105 °C
Failure rate	At 40 °C; $\leq V_R$ , $R_S \geq 3 \Omega/V$ (1 fit = $1 \cdot 10^{-9}$ failures/h)
$C_R \cdot V_R > 330 \mu F \cdot V$	$\leq 38$ fit
Service life	> 500 000 h
Leakage current ( $V_R$ , 5 min, 20 °C)	40 nA/µC
$ESR_{max}$ (20 °C, 100 kHz)	—
IEC climatic category	To IEC 60068-1 55/105/56 (-55/+105 °C; 56 days damp heat test)

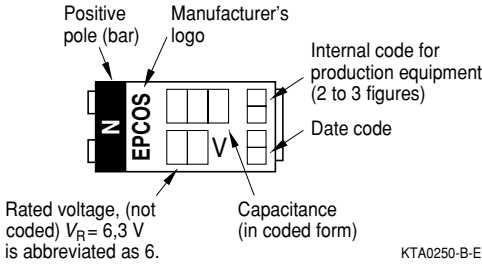
**Dimensional drawing**


- ① Encapsulation: molded epoxy resin
- ② NiFe; tinned surface Sn100

Case size	Dimensions in mm (inches)						
	$L$	$W$	$H$	$L_2$ typ.	$W_2 \pm 0,1$ $\pm(,004)$	$H_2$ typ.	$p \pm 0,3$ $\pm(,012)$
D (40)	$7,3 \pm 0,3$ (,287±,012)	$4,3 \pm 0,3$ (,169±,012)	$2,8 \pm 0,3$ (,110±,012)	7,1 (,280)	2,4 (,094)	1,6 (,062)	1,3 (,051)
E (50)	$7,3 \pm 0,3$ (,287±,012)	$4,3 \pm 0,3$ (,169±,012)	$4,1 \pm 0,3$ (,157±,012)	7,1 (,280)	2,4 (,094)	1,6 (,062)	1,3 (,051)

**Marking**

Case sizes D, E



**Capacitance coding**

1st and 2nd digit	Capacitance in pF
3rd digit	Multiplier: 4 = $10^4$ pF 5 = $10^5$ pF 6 = $10^6$ pF 7 = $10^7$ pF 8 = $10^8$ pF


**Date coding**

Year	Month	
M = 2000	1 = January	7 = July
N = 2001	2 = February	8 = August
P = 2002	3 = March	9 = September
R = 2003	4 = April	O = October
S = 2004	5 = May	N = November
T = 2005	6 = June	D = December

In addition to the year and month of manufacture, the stamp includes another two or three figures which internally allow us an assignment to production equipment.

**Overview of available types**

	HighCap		
Series	B75196H		
$V_R$ (Vdc) up to 85 °C	4	6,3	10
$C_R$ (μF)			
100			D
150		D	D
220		D	D   E
330	D	D   E	E
470	D	E	E
680	E	E	
1000	E		

 Upon request

**Technical data and ordering codes for B75196H**

$V_R$ up to 85°C (up to 105°C) Vdc	$C_R$  $\mu\text{F}$	Case size	$\tan \delta_{\max}$ (20°C, 120 Hz)	$I_{k, \max}$ (20°C, $V_R$ , 5 min) $\mu\text{A}$	$Z_{\max}^{2)}$ (20°C, 100 kHz) $\Omega$	Ordering code <sup>1)</sup>
4,0 (2,5)	330	D	0,10	53	0,9	B75196H0337M40*
	470	D	0,10	75	0,9	B75196H0477M40*
	680	E	0,12	109	0,6	B75196H0687M50*
	1000	E	0,15	160	0,6	B75196H0108M50*
6,3 (4,0)	150	D	0,08	38	0,8	B75196H1157M40*
	220	D	0,08	55	0,8	B75196H1227M40*
	330	D	0,12	83	0,8	B75196H1337M40*
	330	E	0,12	83	0,6	B75196H1337M50*
	470	E	0,12	118	0,6	B75196H1477M50*
	680	E	0,15	171	0,6	B75196H1687M50*
10 (6,3)	100	D	0,08	40	0,8	B75196H2107M40*
	150	D	0,08	60	0,8	B75196H2157M40*
	220	D	0,10	88	0,8	B75196H2227M40*
	220	E	0,08	88	0,6	B75196H2227M50*
	330	E	0,10	132	0,6	B75196H2337M50*
	470	E	0,12	188	0,6	B75196H2477M50*

■ Upon request

Capacitance tolerance: M =  $\pm 20\%$

1) \* Code number for required reel diameter: 9 = 180 mm, 6 = 330 mm  
 2) Low ESR values upon request

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