

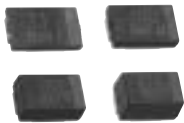
Surface Mount Type

SP-Cap

Series: H

- Features Endurance:125°C 1000h
- Low ESR
- RoHS directive compliant
- Reflow 240°C

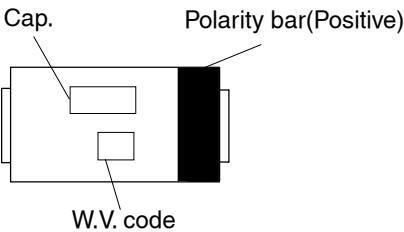
Country of Origin
Japan



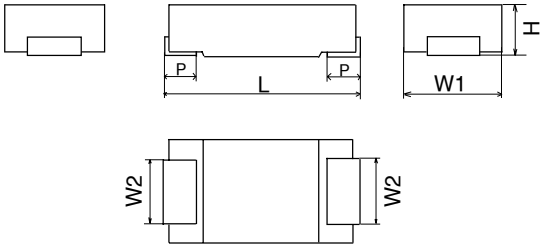
■ Specification

Series & Size Code	HL	HD	HE	
Category Temp.Range	-40 to 125°C			
Rated W.V.Range	2 to 8V.DC			
Nominal Cap.Range	33 to 100μF	68 to 220μF	100 to 330μF	
Capacitance Tolerance	±20 %			
DC Leakage Current	I ≤ 0.1 CV 2minutes			
tan δ	≤ 0.06(120Hz/+20°C)	≤ 0.10(120Hz/ +20°C)		
Surge Voltage	Rated Working Voltage × 1.25 (15 to 35°C)			
Endurance	After applying rated working voltage for 1000 hours at 105±2°C or derated voltage(W.V.×0.875 at 115°C or W.V.×0.75 at 125°C), and then being stabilized at +20°C,capacitor shall meet the following limits.			
	Capacitance change	±10% of initial measured value		
	tan δ	≤ Initial specified value		
	DC leakage current	≤ Initial specified value		
Moisture resistance	After storing for 500 hours at 60°C,90%			
	Capacitance change of initial measurd value	2, 2.5V.DC	4 V.DC	6.3V.DC
		+70, -20%	+60, -20%	+50, -20%
	tan δ	≤ 200% of initial specified value		
	DC leakage current	≤ Initial specified value		

■ Marking



■ Dimensions in mm(not to scale)



(mm)

Series & Size Code	L±0.2	W1±0.2	W2±0.1	H	P±0.3
HL	7.3	4.3	2.4	1.8±0.1	1.3
HD	7.3	4.3	2.4	2.8±0.2	1.3
HE	7.3	4.3	2.4	4.2±0.1	1.3

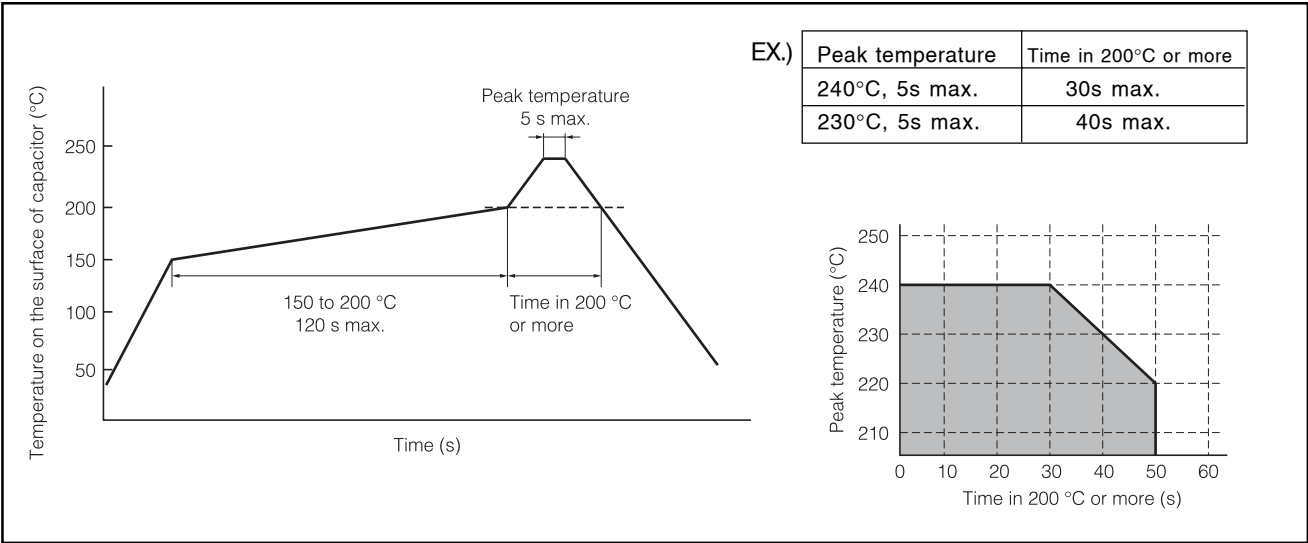
■ High heat-resistant products(H series)

Series & Size Code	Rated W.V. (V.DC)	Capaci- tance (±20%) (μF)	Case Size			Specification		Reflow 240°C	Reflow 260°C	Min. Packaging Q'ty (pcs)
			L (mm)	W (mm)	H (mm)	*1 Ripple current (Ar.m.s.)	*2 ESR (Ω)	Part number	Part number	
HL	2	100	7.3	4.3	1.8	1.8	0.018	EEFHL0D101R	—	3500
	2.5	82	7.3	4.3	1.8	1.8	0.018	EEFHL0E820R	—	3500
	4	56	7.3	4.3	1.8	1.8	0.018	EEFHL0G560R	—	3500
		68	7.3	4.3	1.8	1.8	0.018	EEFHL0G680R	—	3500
	6.3	47	7.3	4.3	1.8	1.8	0.018	EEFHL0J470R	—	3500
	8	33	7.3	4.3	1.8	1.8	0.018	EEFHL0K330R	—	3500
HD	2	180	7.3	4.3	2.8	2.5	0.015	EEFHD0D181R	—	2000
		220	7.3	4.3	2.8	2.5	0.015	EEFHD0D221R	—	2000
	2.5	150	7.3	4.3	2.8	2.5	0.015	EEFHD0E151R	—	2000
		180	7.3	4.3	2.8	2.5	0.015	EEFHD0E181R	—	2000
	4	120	7.3	4.3	2.8	2.5	0.015	EEFHD0G121R	—	2000
	6.3	100	7.3	4.3	2.8	2.5	0.015	EEFHD0J101R	—	2000
	8	68	7.3	4.3	2.8	2.5	0.015	EEFHD0K680R	—	2000
								—	—	2000
HE	2	270	7.3	4.3	4.2	3.0	0.012	EEFHE0D271R	—	2000
		330	7.3	4.3	4.2	3.0	0.012	EEFHE0D331R	—	2000
	2.5	220	7.3	4.3	4.2	3.0	0.012	EEFHE0E221R	—	2000
		270	7.3	4.3	4.2	3.0	0.012	EEFHE0E271R	—	2000
	4	180	7.3	4.3	4.2	3.0	0.012	EEFHE0G181R	—	2000
	6.3	150	7.3	4.3	4.2	3.0	0.012	EEFHE0J151R	—	2000
	8	100	7.3	4.3	4.2	3.0	0.012	EEFHE0K101R	—	2000
								—	—	2000

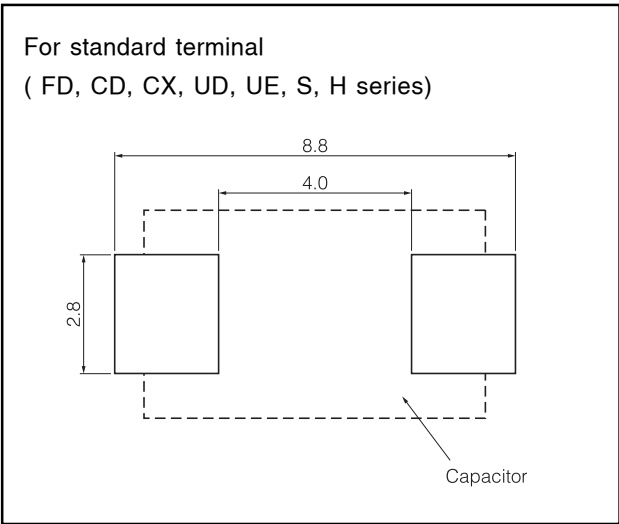
*1: Ripple current (100kHz/ +20 to +105°C),

*2: ESR (100kHz/+20°C)

- Mounting Specifications.
- Recommendable reflow soldering temperature 240°C

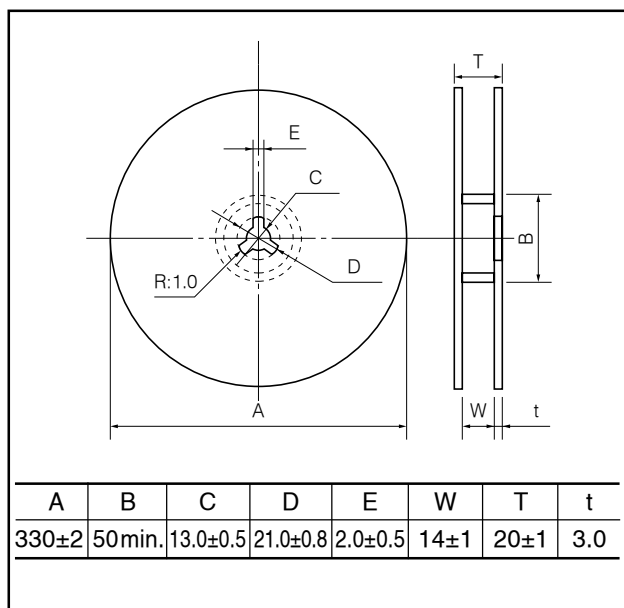


- Typical land pattern (mm)

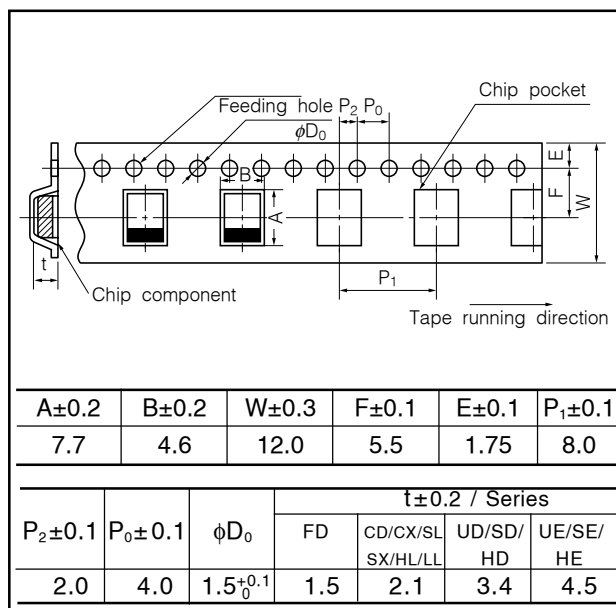


■ Packaging Specifications

● Reel Dimensions (mm)



● Embossed Taping (mm)



■ Packaging Box Dimensions (mm)

