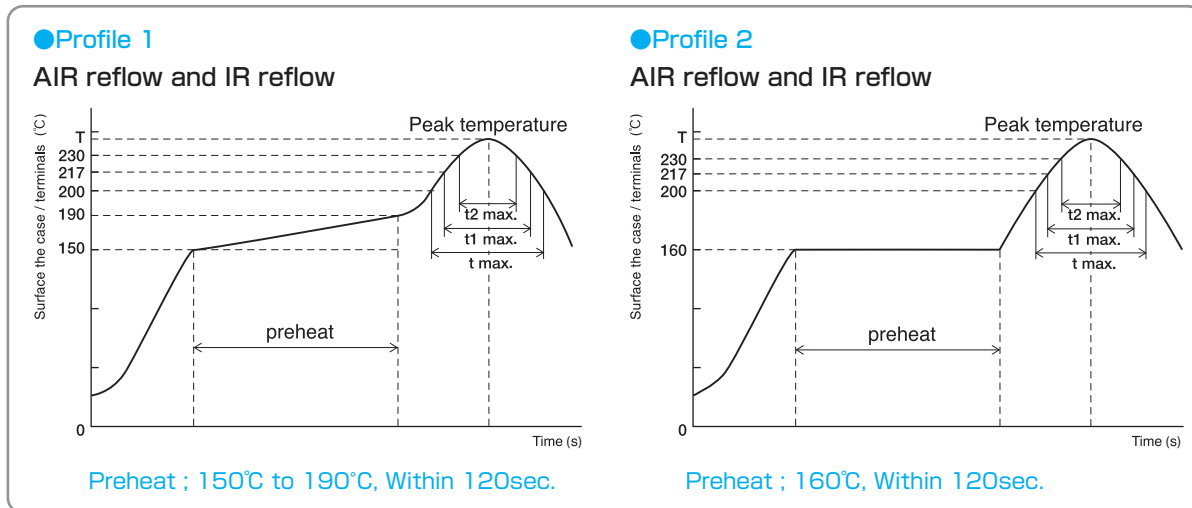


Soldering Condition

- Soldering with a soldering iron : within 3 seconds at 350°C unless otherwise specified in the spec.
- Flow soldering : within 10 seconds at 260°C unless otherwise specified in the spec.
(Do not flow soldering with SMD type.)
- Thermal curing oven : within 2 minutes at below 150°C ambient

Reflow Soldering Condition



Series	Voltage (V)	Size	Time of more than 200°C(t)	Time of more than 217°C(t1)	Time of more than 230°C(t2)	Peak temperature (T)	Reflow cycle	Profile
HVHZ·HVH HVPZ·HVP HVT, HVJ	16 to 63	ALL	Within 100sec.	Within 80sec.	Within 40sec.	260°C★1	2	1
	80 to 125	ALL	Within 100sec.	Within 80sec.	Within 40sec.	250°C★1	2	1
FVL, HVHF HVPF, HVPX HVTX, HVHY HVPY, HVTY HVHC, HVPC FVC, FVFP FVF, FVS	6.3 to 63	ALL	Within 70sec.	Within 50sec.	Within 40sec.	260°C★2	2	2
	80 to 100	ALL	Within 70sec.	Within 50sec.	Within 40sec.	260°C★2	1	2
			Within 70sec.	Within 50sec.	Within 40sec.	250°C★3	2	2

The maximum cycle of reflow soldering is two times. The second cycle must be done after sufficient cooling time of more than one hour to return the temperatures of circuit boards and components back to room temperature.

- ★1 Within 5sec.
★2 Not more than 260°C
★3 Not more than 250°C

Ripple Current Frequency Coefficient

Series	Capacitance C (μF)	Frequency : f (Hz)								
		100≤f<1k	1k≤f<5k	5k≤f<10k	10k≤f<20k	20k≤f<30k	30k≤f<40k	40k≤f<50k	50k≤f<100k	100k
FVL, HVHZ·HVH HVPZ·HVP, HVT HVJ, HVHF, HVPF HVPX, HVTX, HVHY HVPY, HVTY, HVHC HVPC, HEH HEHZ, HEZ, HEHF HEPF, HEPC	C≤22	0.05	0.25	0.45	0.55	0.65	0.70	0.75	0.80	1.00
	22<C≤47	0.10	0.35	0.55	0.65	0.75	0.80	0.80	0.85	1.00
	47<C≤150	0.10	0.40	0.65	0.70	0.80	0.85	0.85	0.90	1.00
	150<C	0.15	0.45	0.65	0.75	0.80	0.85	0.85	0.90	1.00
FVS	ALL	0.10	0.20	0.40	0.50	0.65	0.75	0.80	0.85	1.00

Series	Case size φD(mm)	Frequency : f (Hz)								
		100≤f<1k	1k≤f<5k	5k≤f<10k	10k≤f<20k	20k≤f<30k	30k≤f<40k	40k≤f<50k	50k≤f<100k	100k
FVC, FVFP, FVF, FEC, FEFP, FEF	φ5, φ6.3	0.15	0.35	0.55	0.60	0.75	0.80	0.85	0.90	1.00
	φ8	0.15	0.40	0.65	0.70	0.80	0.85	0.90	0.90	1.00
	φ10	0.20	0.50	0.65	0.75	0.85	0.90	0.90	0.95	1.00

A peak voltage with a ripple current shall be less than the rated voltage.
A peak voltage with a ripple current shall not be a reverse voltage.