

Fig. 26 Constant power discharge in a supercapacitor

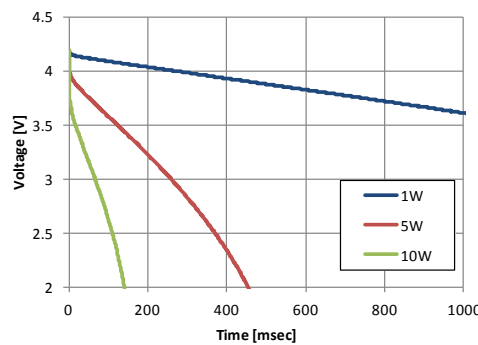


Fig. 27 Constant power discharge of DMT334R2S474M3DTA0 (discharge from 4.2 V @25°C)

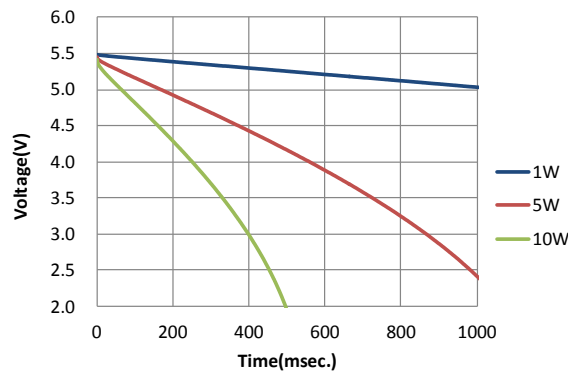


Fig. 28 Constant power discharge of DMF3Z5R5H474M3DTA0 (discharge from 5.5 V @25°C)

5.5. Temperature dependences (Cap, ESR, thickness)

Murata's supercapacitors have temperature dependences in capacitance, ESR and thickness (Fig. 29, Fig. 30).

In case of DMT334R2S474M3DTA0, the capacitance gets lower at lower temperature. The capacitance at -40°C is 70% of the one at 25°C. This is because that DMT has higher inner resistances especially at lower temperature and ions at deeper site are not discharged easily (Fig. 8). It means that electric charges