$$J_g(z) \in K^{\mathbb{C}}$$

$$J_{g_1 g_2}(z) = J_{g_1}\left(g_2(z)\right) J_{g_2}(z)$$

$$R(z{:}w) = R(\overset{*}{w}{:}z) \in K^{\mathbb{C}}$$

$$J_g(z)\, R(g\cdot z{:}g\cdot w)\, J_g(\overset{*}{w}) = R(z{:}w)$$

$$J_g(z)\, R(g\cdot z{:}g\cdot z)\, J_g(\overset{*}{z}) = R(z{:}z)$$

$$j_g(z) = \overset{-1/2}{R}(z{:}z)\, J_g(z)\, \overbrace{\underbrace{\overset{-1/2}{R}(z{:}z) J_g(z)}_{*} \overset{-1/2}{R}(z{:}z) J_g(z)}^{-1/2} = \overset{-1/2}{R}(z{:}z)\, J_g(z)\, \underbrace{\overset{*}{J_g}(z) \overset{-1}{R}(z{:}z) J_g(z)}_{-1/2} \in K$$

$$j_{g_1 g_2}(z) = j_{g_1}\left(g_2(z)\right) j_{g_2}(z)$$