

$$w \equiv \begin{cases} 0 & c = d = 0 & (9.4a) \\ \sqrt{|c|} \sqrt{\frac{1 + \sqrt{1 + (d/c)^2}}{2}} & |c| \geq |d| & (9.4b) \\ \sqrt{|d|} \sqrt{\frac{|c/d| + \sqrt{1 + (c/d)^2}}{2}} & |c| < |d| & (9.4c) \end{cases}$$

$$\sqrt{c + id} = \begin{cases} 0 & w = 0 \text{ (case 9.4a)} & (9.5a) \\ w + i \frac{d}{2w} & w \neq 0, c \geq 0 & (9.5b) \\ \frac{|d|}{2w} + iw & w \neq 0, c < 0, d \geq 0 & (9.5c) \\ \frac{|d|}{2w} - iw & w \neq 0, c < 0, d < 0 & (9.5d) \end{cases}$$