The original model-free equation

$$J(\omega) = \frac{2}{5}\left(\frac{S^2.t_m}{1+(\omega t_m)^2} + \frac{(1-S^2)t'_e}{1+(\omega t'_e)^2}\right)$$

The extended model-free equation

$$J(\omega) = \frac{2}{5}\left(\frac{S^2.t_m}{1+(\omega t_m)^2} + \frac{(1-S_f^2)t'_f}{1+(\omega t'_f)^2} + \frac{S_s^2(1-S_f^2)t'_s}{1+(\omega t'_s)^2}\right)$$