Quasi-convex functions with respect to symmetric conjugate points

ABSTRACT

Let $C_{sc}(A,B)$ denote the class of functions f which are analytic in an open unit disc $\mathcal{D} = \{z: |z| < 1\}$ and satisfying the condition $\frac{2(zf'(z))'}{(f(z)-\overline{f(-\bar{z})})'} \prec \frac{1+Az}{1+Bz}, -1 \leq B < A \leq 1, z \in \mathcal{D}$. In this paper, we consider the class $K_{sc}^{*}(A,B)$ consisting of analytic functions f and satisfying $\frac{(zf'(z))'}{(g(z)-\overline{g(-\bar{z})})'} \prec \frac{1+Az}{1+Bz}, g \in C_{sc}(A,B), -1 \leq B < A \leq 1, z \in \mathcal{D}$. The aims of paper are to determine coefficient estimates and distortion bounds for the class $K_{sc}^{*}(A,B)$.