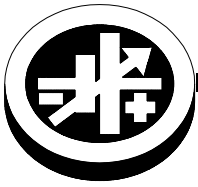


APPLICATION NOTE



KEPCO An ISO 9001 Company.

BOP
003

BOP L Option

How Does Bandwidth Change Relative to the Load?

I — INTRODUCTION

The 3dB bandwidth in current mode for linear BOP 100W, 200W and 400W models with the L option is specified for a 2mH inductive load (of approximately 0.3 Ohms). This application note describes how the bandwidth of BOP L option models changes when the load inductance is different than 2mH.

II — BANDWIDTH CHANGES.

The 3dB bandwidth for an inductance value different than 2mH can be calculated by the following formula:

$$\sqrt{(L)/2}$$

where L is the load's inductance value in mH.

The bandwidth value is limited at the upper end by the unit's short-circuit 3-dB bandwidth value. This coefficient is applicable when the load's time constant (L/R) is less than 1ms.