

: 1. : « », 2001. – 273 . 2. : « », 2006. – 260 .

615.84

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, , - , - . . . [1]. , - , (-1, -2) (717, -1) - , - , (. .1,).

(40 %

10 %),

[2].

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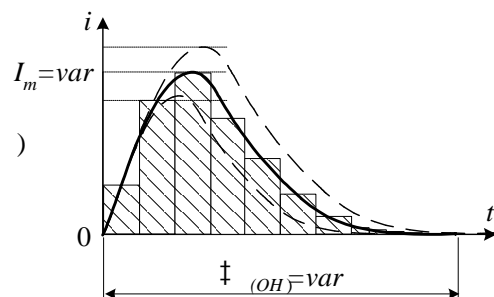
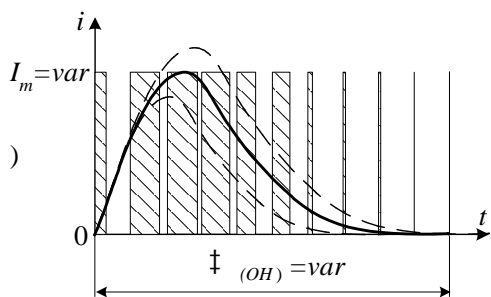
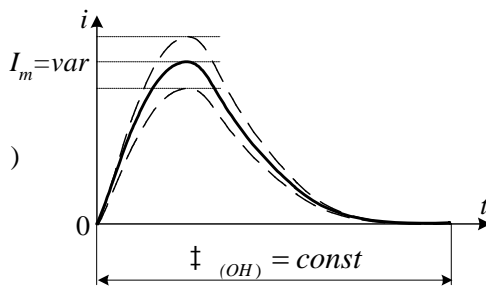
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(. . 1,) [3].

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, 1999. – 432 . 2.
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2006. – . 121-130. 3.
123-128.

62-83:681.5

$V / f = const$,
. 1.
36 60; 2 470
; IGBT- PM15CSJ060
MITSUBISHI ELECTRIC
- 1,5
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