(E)

$$k = k\underline{/\phi} = |k)\, e^{j\phi} \qquad \text{eule form.}$$

$$k = \frac{V_r}{V_{in}}$$

$$k = \frac{a\, e^{-j\beta y}}{b\, e^{j\beta y}}$$

ar $Re^{i\alpha}$ $\qquad y = 0 \qquad k = \dfrac{a}{b}$

$$k = |k|\, e^{j\phi}$$

$$\frac{a}{b} = |k|\, e^{j\phi}$$

$$a = b|k|\, e^{j\phi}$$

$$V_x = b\, e^{j\beta y} + b|k|\, e^{j\phi}\, e^{-j\beta y}$$

$$= b\, e^{j\beta y} \left\{ 1 + |k|\, e^{j\phi}\, e^{-j2\beta y} \right\}$$

tanig ony modun

$$|V_x| = |b| \left\{ 1 + |k|\, e^{-j(2j\beta y - \phi)} \right\}$$

dr V_{max} $\qquad\qquad 2\beta y_{max} - \phi = 2n\pi$

$$|V_{max}) = |b| \left\{ 1 + |k| \right\}$$

dr V_{min}

$$2\beta y_{min} - \phi = (2n+1)\pi$$

$$|V_{min}| = |b| \left\{ (1 - k?) \right\}$$

$$\boxed{\delta = \frac{1 + |k|}{1 - |k|}}$$