## **GLOSSARY**

1CE one-stage common-emitter amplifier

2CE two-stage common-emitter amplifier

**2EET** Two Extra Element Theorem

 $A, A_v$  voltage gain

BJT bipolar junction transistor

CT Chain Theorem

dnti double null triple injection condition or calculation

dpi driving-point impedance

dpr driving-point resistance

D-OA design-oriented analysis

D discrepancy factor

 $D_n$  null discrepancy factor

**DT** Dissection Theorem

**EET** Extra Element Theorem

*F* feedback factor

**FET** field-effect transistor

G closed-loop voltage gain

 $G_{\infty}$  ideal closed-loop voltage gain

**GFT** General Feedback Theorem

2GFT Two General Feedback Theorem

H any TF

 $H_{\infty}$  H when  $T = \infty$ 

 $H_0$  H when T=0

 $H^{uy}$  H when the superscript signal is nulled

K feedback ratio

 $K_d$ ,  $K_n$  si, ndi interaction parameter

LEE low entropy expression

*m* miller multiplier

ndi null double injection condition or calculation

**NEET** N Extra Element Theorem

 $R_{dp}$  driving-point resistance

 $R_d$ ,  $R_n$  si, ndi dpr's

rhp right half plane (negative zero)

si single injection condition or calculation

T return ratio or loop gain

 $T_i$  current return ratio or loop gain

$T_v$	voltage return ratio or loop gain
$T_i^{v_y}$	short-circuit current return ratio or loop gain
$T_v^{i_y}$	open-circuit voltage return ratio or loop gain
$T_{i\ rev}^{v_x}$	short-circuit reverse current return ratio or loop gain
$T_{v\ rev}^{i_x}$	open-circuit reverse voltage return ratio or loop gain
$T_n$	null return ratio or null loop gain
$T_{ni}$	current null return ratio or null loop gain
$T_{nv}$	voltage null return ratio or null loop gain
$T_{ni}^{v_y}$	short-circuit null current return ratio or null loop gain
$T_{nv}^{i_y}$	open-circuit null voltage return ratio or null loop gain
$T_{ni}^{v_x}$ rev	short-circuit reverse current null return ratio or null loop gain
$T_{nv}^{i_x}$ rev	open-circuit reverse voltage null return ratio or null loop gain

**TF** transfer function

 $Y_t$  forward transadmittance

 $Z_{dp}$  driving-point impedance

 $Z_d$ ,  $Z_n$  si, ndi dpi's

 $Z_d$ ,  $Z_n$  si, ndi dpi's

 $Z_i, Z_o$  outside input, output impedance

 $Z_i^*, Z_o^*$  inside input, output impedance

**Z**<sub>t</sub> forward transimpedance