MICRO ELECTRONICS

# CL055 CL066

THE CL055 (PNP) AND CL066 (NPN) ARE SILICON PLANAR EPITAXIAL COMPLEMENTARY PAIR SPECIALLY DESIGNED FOR 1-WATT AUDIO AMPLIFIER OUTPUT AND SWITCHING APPLICATIONS. THEY FEATURE LOW COLLECTOR-EMITTER KNEE VOLTAGE AND GOOD LINEARITY OF D.C. CURRENT GAIN.

CASE TO-92A

EBC

ABSOLUTE MAXIMUM RATINGS For p-n-p devices, voltage and current values are negative

| | | |
|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | 25V |
| Collector-Emitter Voltage | $V_{CEO}$ | 20V |
| Emitter-Base Voltage | $V_{EBO}$ | 5V |
| Collector Current | $I_C$ | 1A |
| Collector Peak Current ($t \leq 50mS$) | $I_{CM}$ | 1.5A |
| Total Power Dissipation @ $T_C \leq 25°C$ | $P_{tot}$ | 1.5W |
| Without Heat Sink @ $T_A \leq 25°C$ | | 625mW |
| Operating Junction & Storage Temperature | $T_j$, $T_{stg}$ | -55 to 150°C |

ELECTRICAL CHARACTERISTICS ($T_A$=25°C unless otherwise noted)

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNIT | TEST CONDITIONS |
|---|---|---|---|---|---|---|
| Collector-Base Breakdown Voltage | $BV_{CBO}$ | 25 | | | V | $I_C$=100μA $I_E$=0 |
| Collector-Emitter Breakdown Voltage | $LV_{CEO}$ * | 20 | | | V | $I_C$=10mA $I_B$=0 |
| Collector-Emitter Cutoff Current | $I_{CES}$ | | | 0.5 | μA | $V_{CE}$=20V $V_{BE}$=0 |
| Emitter-Base Cutoff Current | $I_{EBO}$ | | | 1.0 | μA | $V_{EB}$=5V $I_C$=0 |
| Collector-Emitter Knee Voltage | $V_{CEK}$ | | 0.25 | 0.5 | V | $I_C$=0.2A $I_B$=value at which $I_C$=0.22A $V_{CE}$=1V |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$* | | 0.21 | 0.4 | V | $I_C$=0.5A $I_B$=0.05A |
| Base-Emitter Voltage | $V_{BE}$ * | | 0.87 | 1.2 | V | $I_C$=0.5A $V_{CE}$=1V |
| D.C. Current Gain (Note) | $H_{FE}$ 1 * | 50 | 160 | 360 | | $I_C$=0.1A $V_{CE}$=1V |
| | $H_{FE}$ 2 * | 20 | 80 | | | $I_C$=1A $V_{CE}$=2V |
| Current Gain-Bandwidth Product | $f_T$ | | 120 | | MHz | $I_C$=50mA $V_{CE}$=10V |

Note : $H_{FE}$ 1 is classified as follows. Group A : 50-100 Group B : 80-160 Group C : 120-240 Group D : 180-360

* Pulse Test : Pulse Width=0.3mS, Duty Cycle=1%

MICRO ELECTRONICS LTD. 美科有限公司
38, Hung To Road, Microtron Building, Kwun Tong, Kowloon, Hong Kong.
Kwun Tong P.O. Box 69477 Hong Kong. Fax No. 341 0321 Telex: 43510 Micro Hx. Tel: 343 0181-5