

+5.0V, ±15kV ESD-Protected, Fail-Safe, Hot-Swap, RS-485/RS-422 Transceivers

General Description

The MAX13080E–MAX13089E +5.0V, ±15kV ESD-protected, RS-485/RS-422 transceivers feature one driver and one receiver. These devices include fail-safe circuitry, guaranteeing a logic-high receiver output when receiver inputs are open or shorted. The receiver outputs a logic-high if all transmitters on a terminated bus are disabled (high impedance). The MAX13080E family include a hot-swap capability to eliminate false transitions on the bus during power-up or hot insertion.

The MAX13080E/MAX13081E/MAX13082E feature reduced slew-rate drivers that minimize EMI and reduce reflections caused by improperly terminated cables, allowing error-free data transmission up to 250kbps. The MAX13083E/MAX13084E also feature slew-rate-limited drivers but allow

MAX13080E-MAX13084E/

MAX13086E-MAX13089E

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DC ELECTRICAL CHARACTERISTICS (continued)

(V_{CC} = +5.0V ±10%, T_A = T_{MIN} to T_{MAX}, unless otherwise noted. Typical values are at V_{CC} = +5.0V and T_A = +25°C.) (Note 1)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Driver Short-Circuit Output Current	I _{OSD}	0 ≤ V _{OUT} ≤ +12V (Note 3)	40		250	mA
		-7V ≤ V _{OUT} ≤ V				

