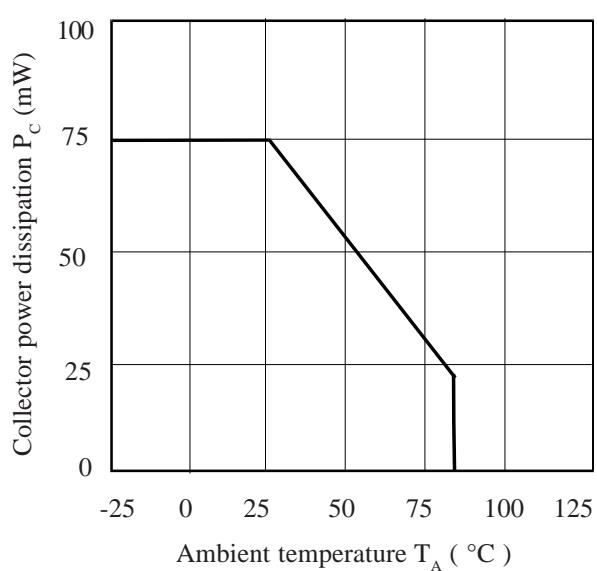


**ELECTRICAL CHARACTERISTICS (  $T_A = 25^\circ\text{C}$  Unless otherwise noted )**

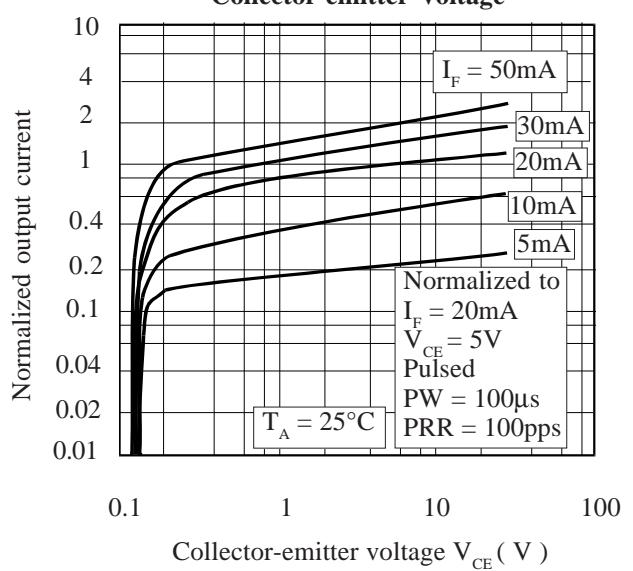
PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage ( $V_F$ ) Reverse Voltage ( $V_R$ ) Reverse Current ( $I_R$ )	5	1.2	1.7 100	V V $\mu\text{A}$	$I_F = 50\text{mA}$ $I_R = 100\mu\text{A}$ $V_R = 5\text{V}$
Output	Collector-emitter Breakdown ( $BV_{CEO}$ )	30			V	$I_C = 1\text{mA}$
	Emitter-collector Breakdown ( $BV_{ECO}$ ) Collector-emitter Dark Current ( $I_{CEO}$ )	5		100	V $\text{nA}$	$I_E = 100\mu\text{A}$ $V_{CE} = 10\text{V}$
Coupled	On-State Collector Current $I_C(\text{ON})$ ( Note 1 ) H21A1, H22A1 H21A2, H22A2 H21A3, H22A3 Collector-emitter Saturation Voltage $V_{CE(\text{SAT})}$ H21A2, 3, H22A2, 3 H21A1, H22A1 Turn-on Time $t_{on}$ Turn-off Time $t_{off}$	0.15 1.0 1.9 0.3 2.0 3.0 0.6 4.0 5.5			mA mA mA mA mA mA mA mA mA	5mA $I_F$ , 5V $V_{CE}$ 20mA $I_F$ , 5V $V_{CE}$ 30mA $I_F$ , 5V $V_{CE}$ 5mA $I_F$ , 5V $V_{CE}$ 20mA $I_F$ , 5V $V_{CE}$ 30mA $I_F$ , 5V $V_{CE}$ 5mA $I_F$ , 5V $V_{CE}$ 20mA $I_F$ , 5V $V_{CE}$ 30mA $I_F$ , 5V $V_{CE}$ 20mA $I_F$ , 1.8mA $I_C$ 30mA $I_F$ , 1.8mA $I_C$ $V_{CC} = 5\text{V}$ , $I_F = 30\text{mA}, R_L = 2.5\text{k}\Omega$

Note 1      Special Selections are available on request. Please consult the factory.

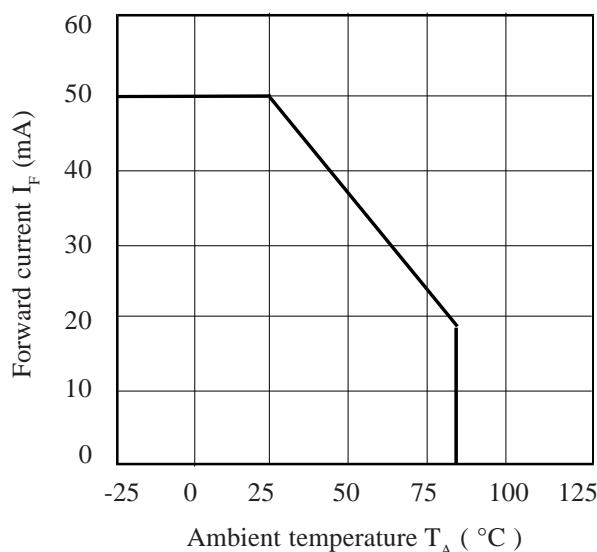
**Collector Power Dissipation vs. Ambient Temperature**



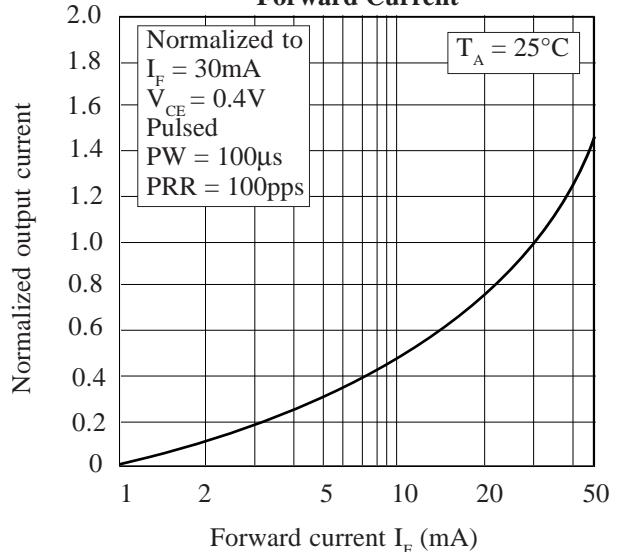
**Normalized Output Current vs. Collector-emitter Voltage**



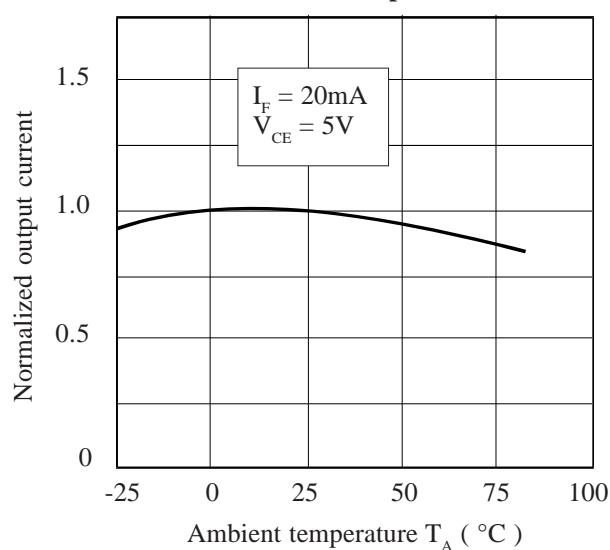
**Forward Current vs. Ambient Temperature**



**Normalized Output Current vs. Forward Current**



**Normalized Output Current vs. Ambient Temperature**



**Collector-emitter Saturation Voltage vs. Ambient Temperature**

