

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

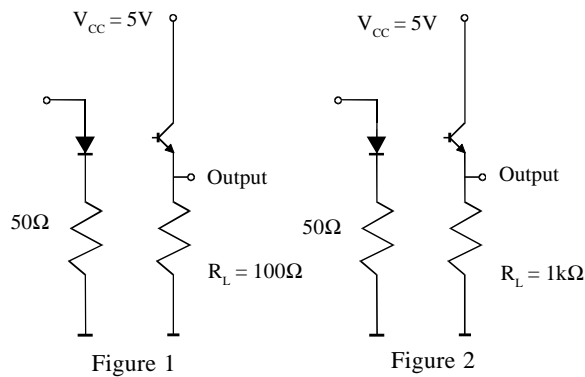
PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION	
Input	Forward Voltage (V_F)		1.2	1.60	V	$I_F = 50\text{mA}$	
	Reverse Current (I_R)			10	μA	$V_R = 6\text{V}$	
Output	Collector-emitter Breakdown (BV_{CEO}) (Note 2)	90			V	$I_C = 1\text{mA}$	
	Collector-base Breakdown (BV_{CBO})	90			V	$I_C = 100\mu\text{A}$	
	Emitter-collector Breakdown (BV_{ECO})	6			V	$I_E = 100\mu\text{A}$	
	Collector-emitter Dark Current (I_{CEO})			150	nA	$V_{CE} = 20\text{V}$	
Coupled	I_C / I_F (CTR) (Note 2)	CNY75A	15		%	$1\text{mA } I_F, 5\text{V } V_{CE}$	
		CNY75B	30		%	$1\text{mA } I_F, 5\text{V } V_{CE}$	
		CNY75C	60		%	$1\text{mA } I_F, 5\text{V } V_{CE}$	
		CNY75A	63	125	%	$10\text{mA } I_F, 5\text{V } V_{CE}$	
		CNY75B	100	200	%	$10\text{mA } I_F, 5\text{V } V_{CE}$	
		CNY75C	160	320	%	$10\text{mA } I_F, 5\text{V } V_{CE}$	
	Collector-emitter Saturation Voltage $V_{CE(SAT)}$			0.3	V	$10\text{mA } I_F, 1\text{mA } I_C$	
	Input to Output Isolation Voltage V_{ISO}		5300			V_{RMS}	See note 1
			7500			V_{PK}	See note 1
	Input-output Isolation Resistance R_{ISO}		5×10^{10}			Ω	$V_{IO} = 500\text{V}$ (note 1)

Note 1 Measured with input leads shorted together and output leads shorted together.

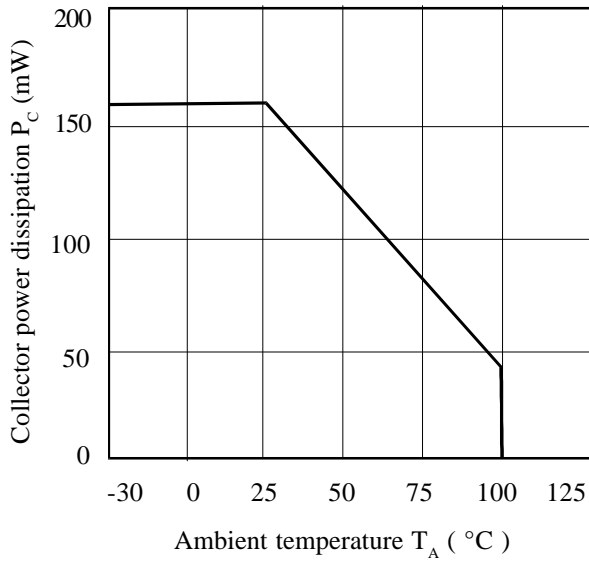
Note 2 Special Selections are available on request. Please consult the factory.

TYPICAL SWITCHING CHARACTERISTICS

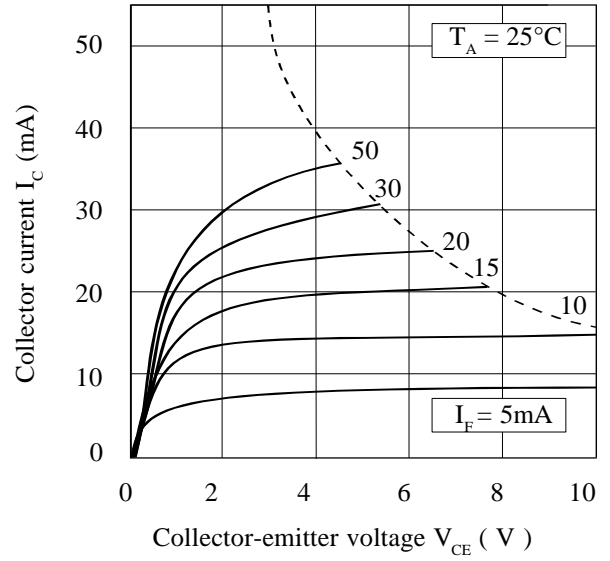
Type	$R_L = 100\Omega$ see fig 1							$R_L = 1k\Omega$ see fig 2		
	td	tr	ton	ts	tf	toff	I_C	ton	toff	I_F
	μs	μs	μs	μs	μs	μs	mA	μs	μs	mA
CNY75A	2.0	2.5	4.5	0.3	2.7	3.0	10	10	25	20
CNY75B	2.5	3.0	5.5	0.3	3.7	4.0	10	16.5	20	10
CNY75C	2.8	4.2	7.0	0.3	4.7	5.0	10	11	37.5	10



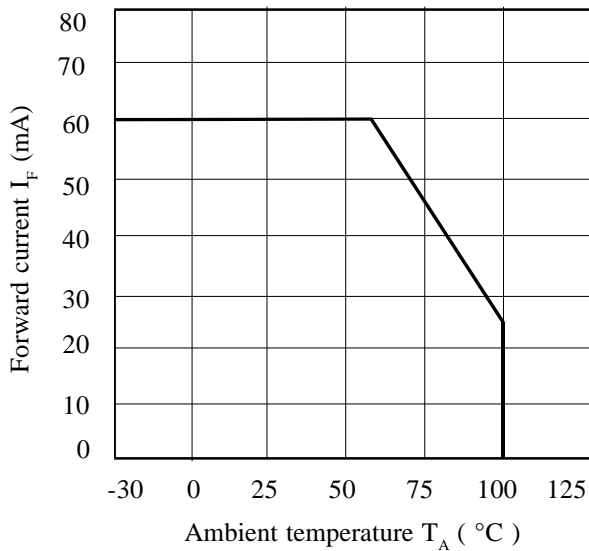
Collector Power Dissipation vs. Ambient Temperature



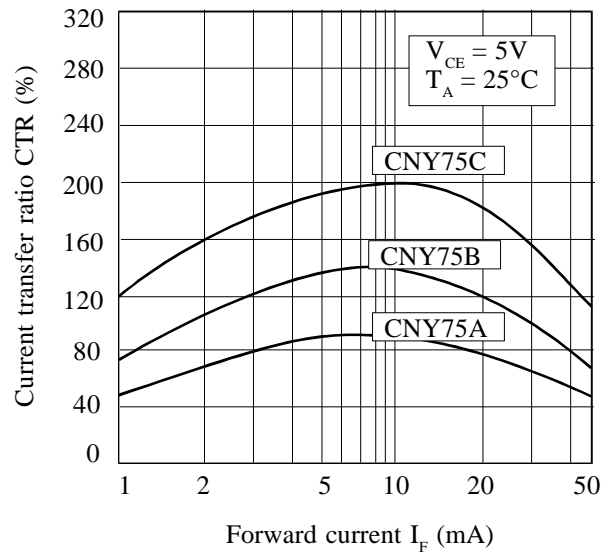
Collector Current vs. Collector-emitter Voltage (normalised to CNY75B)



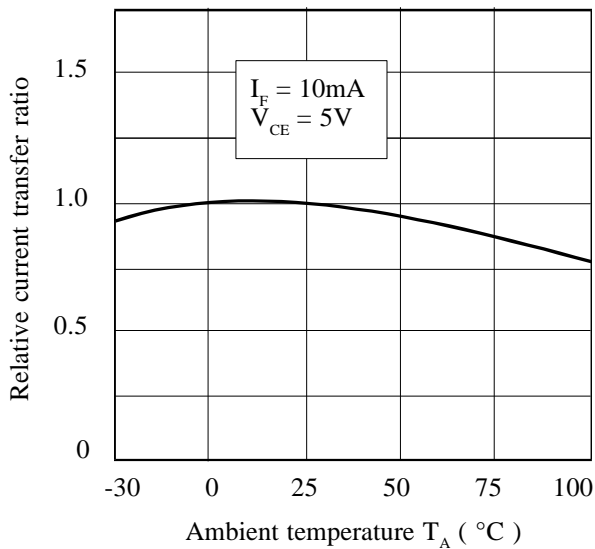
Forward Current vs. Ambient Temperature



Current Transfer Ratio vs. Forward Current



Relative Current Transfer Ratio vs. Ambient Temperature



Collector-emitter Saturation Voltage vs. Ambient Temperature

