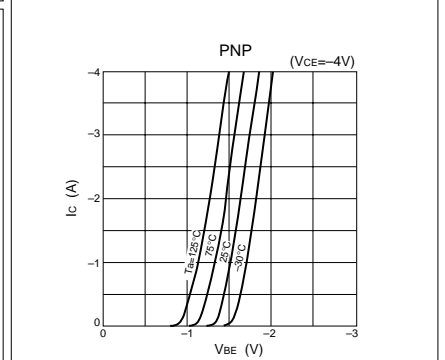
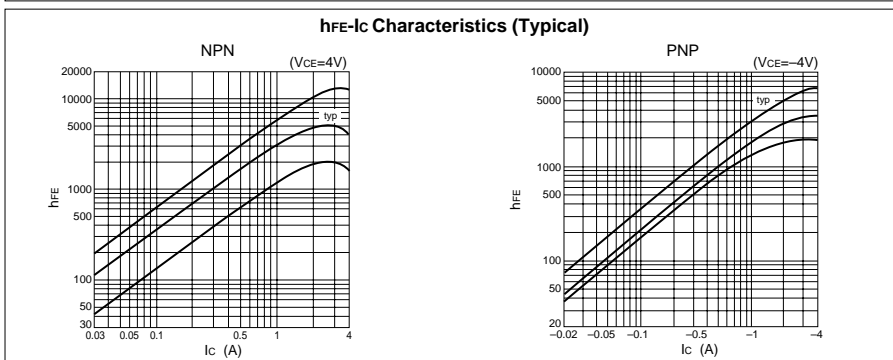
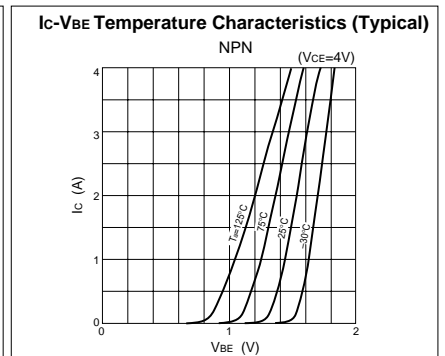
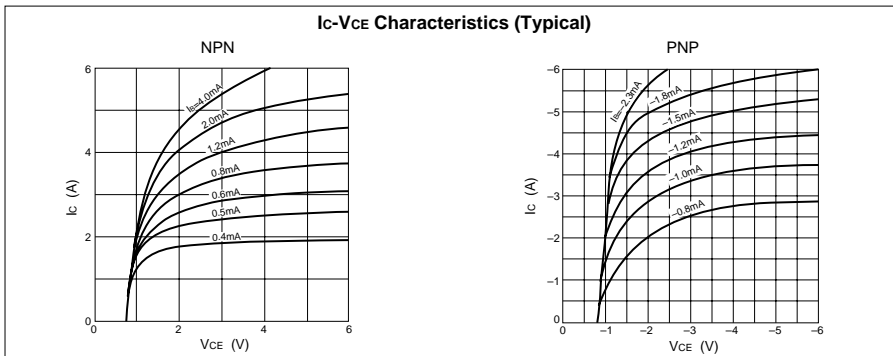
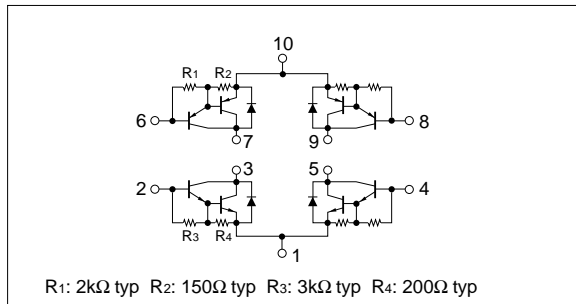


Absolute maximum ratings

($T_a=25^\circ\text{C}$)

Symbol	Ratings		Unit
	NPN	PNP	
V_{CBO}	80	-60	V
V_{CEO}	60	-60	V
V_{EBO}	6	-6	V
I_C	4	-4	A
I_{CP}	8 (PW \leq 10ms, Du \leq 50%)	-8 (PW \leq 10ms, Du \leq 50%)	A
P_T	4 ($T_a=25^\circ\text{C}$)		W
	20 ($T_c=25^\circ\text{C}$)		
T_j	150		$^\circ\text{C}$
T_{stg}	-40 to +150		$^\circ\text{C}$

Equivalent circuit diagram



Electrical characteristics

($T_a=25^\circ\text{C}$)

Symbol	NPN					PNP				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
I_{CBO}			100	μA	$V_{CB}=80\text{V}$			-100	μA	$V_{CB}=-60\text{V}$
I_{EBO}			10	mA	$V_{EB}=6\text{V}$			-10	mA	$V_{EB}=-6\text{V}$
V_{CEO}	60			V	$I_C=10\text{mA}$	-60			V	$I_C=-10\text{mA}$
h_{FE}	1000				$V_{CE}=4\text{V}, I_C=3\text{A}$	1000				$V_{CE}=-4\text{V}, I_C=-3\text{A}$
$V_{CE(sat)}$			2.0	V	$I_C=3\text{A}, I_B=10\text{mA}$			-2.0	V	$I_C=-2\text{A}, I_B=-10\text{mA}$
t_{on}		1.0		μs	$V_{CC} \doteq 30\text{V},$ $I_C=3\text{A},$ $I_{B1}=-I_{B2}=10\text{mA}$		0.4		μs	$V_{CC} \doteq -30\text{V},$ $I_C=-3\text{A},$ $I_{B1}=-I_{B2}=-10\text{mA}$
t_{stg}		4.0		μs			0.8		μs	
t_f		1.5		μs			0.6		μs	

