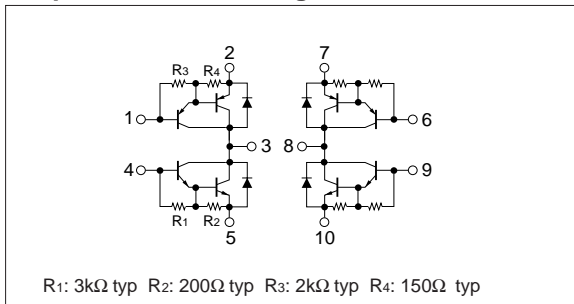


Absolute maximum ratings

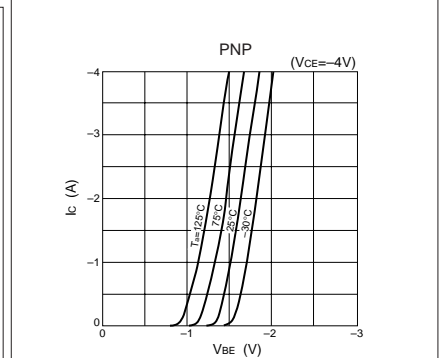
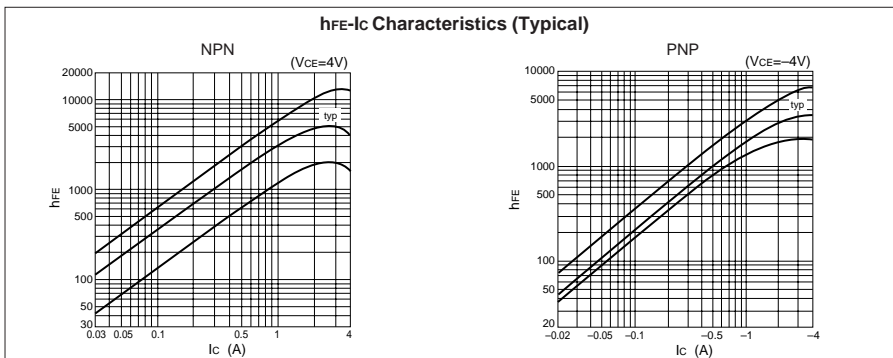
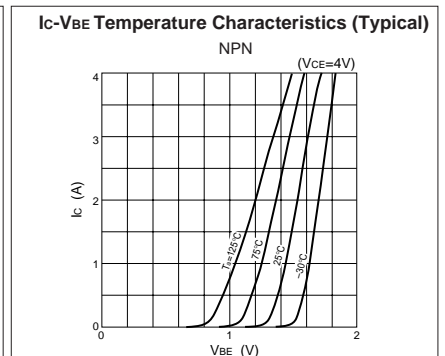
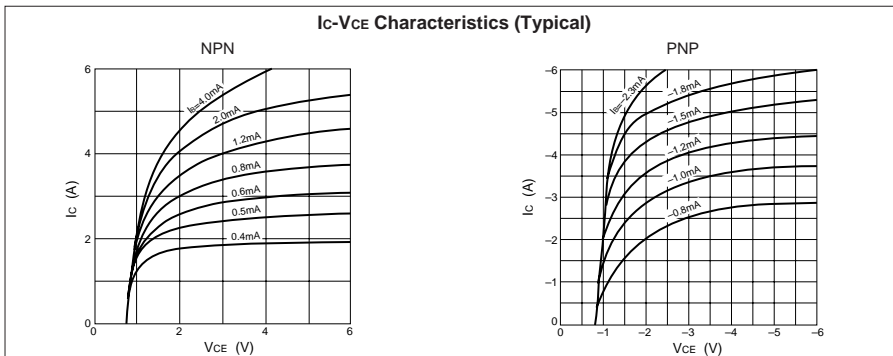
($T_a=25^\circ\text{C}$)

Symbol	Ratings		Unit
	NPN	PNP	
V_{CBO}	60	-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



Characteristic curves



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}			10	μA	$V_{CB}=60\text{V}$			-10	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	$I_C=-10\text{mA}$
hFE	2000				$V_{CE}=4\text{V}, I_C=2\text{A}$	2000				$V_{CE}=-4\text{V}, I_C=-2\text{A}$
$V_{CE}(\text{sat})$			1.5	V	$I_C=2\text{A}, I_B=4\text{mA}$			-1.5	V	$I_C=-2\text{A}, I_B=-4\text{mA}$
$V_{BE}(\text{sat})$			2.0	V				-2.0	V	
V_{FEC}			1.6	V	$I_{FEC}=2\text{A}$			-1.6	V	$I_{FEC}=-2\text{A}$

Characteristic curves

