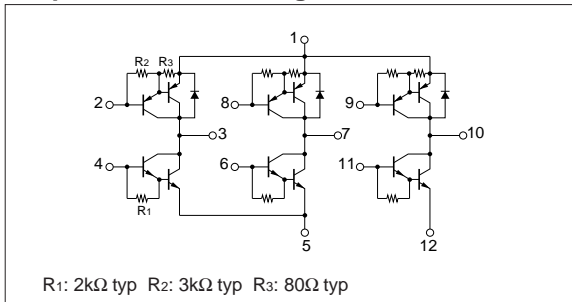


Absolute maximum ratings

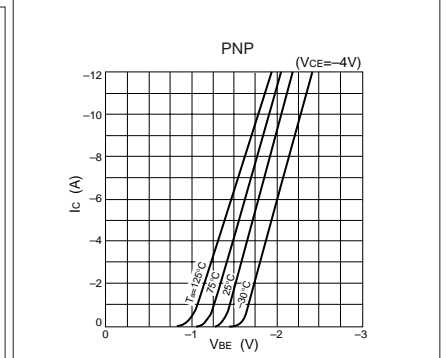
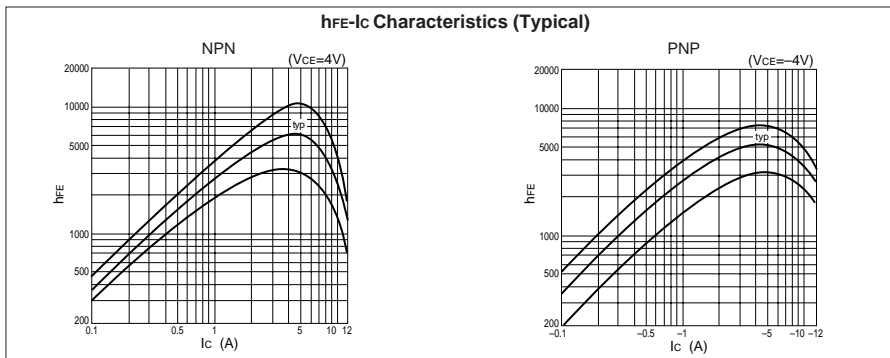
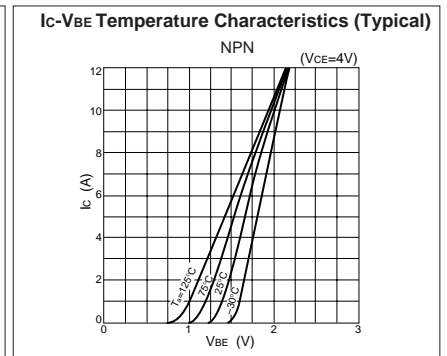
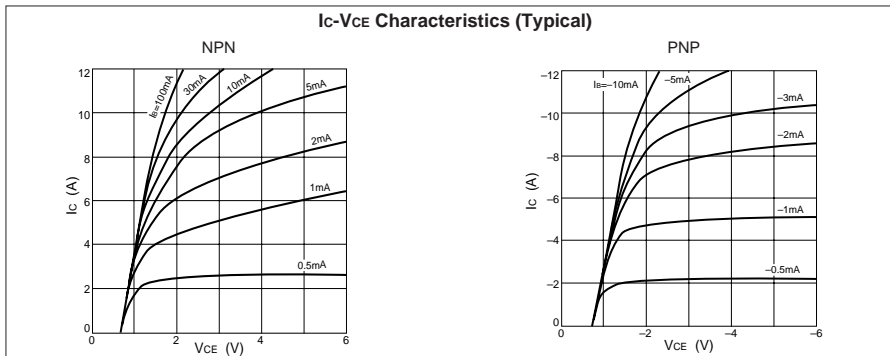
(Ta=25°C)

Symbol	Ratings		Unit
	NPN	PNP	
V _{CB0}	60	-60	V
V _{CE0}	60	-60	V
V _{EB0}	6	-6	V
I _c	6	-6	A
I _{CP}	12 (PW≤1ms, Du≤50%)	-12 (PW≤1ms, Du≤50%)	A
I _B	0.5	-0.5	A
P _T	5 (Ta=25°C)		W
	25 (Tc=25°C)		
V _{ISO}	1000 (Between fin and lead pin, AC)		V _{rms}
T _J	150		°C
T _{stg}	-40 to +150		°C
θ _{J-c}	5		°C/W

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	μA	$V_{EB}=6\text{V}$			-10	mA	$V_{EB}=-6\text{V}$	
V_{CEO}	60			V	$I_C=25\text{mA}$	-60			V	$I_C=-25\text{mA}$	
h_{FE}	2000	5000	12000		$V_{CE}=4\text{V}, I_C=5\text{A}$	2000	5000	12000		$V_{CE}=-4\text{V}, I_C=-5\text{A}$	
$V_{CE(sat)}$			1.5	V	$I_C=5\text{A}, I_B=10\text{mA}$			-1.5	V	$I_C=-5\text{A}, I_B=-10\text{mA}$	
$V_{BE(sat)}$			2.0	V				-2.0	V		
V_{FEC}				V				2.0	V		$I_{FEC}=5\text{A}$
t_{rr}				μs			1.0		μs	$I_{FEC}=\pm 0.5\text{A}$	
t_{on}		0.8		μs	$V_{CC}=\pm 25\text{V}, I_C=5\text{A}, I_{B1}=-I_{B2}=10\text{mA}$			1.0		μs	$V_{CC}=\pm 25\text{V}, I_C=-5\text{A}, I_{B1}=-I_{B2}=-10\text{mA}$
t_{stg}		6.0		μs				1.4		μs	
t_f		2.0		μs				0.6		μs	
f_T		80		MHz				120		MHz	
C_{ob}		100		pF	$V_{CB}=10\text{V}, f=1\text{MHz}$			150		pF	$V_{CB}=-10\text{V}, f=1\text{MHz}$

Characteristic curves

