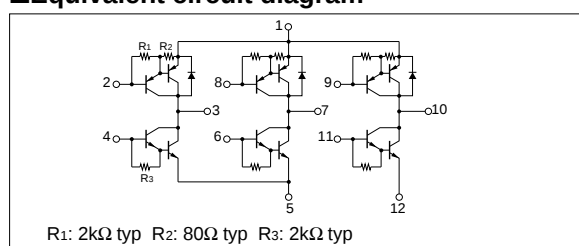


Absolute maximum ratings

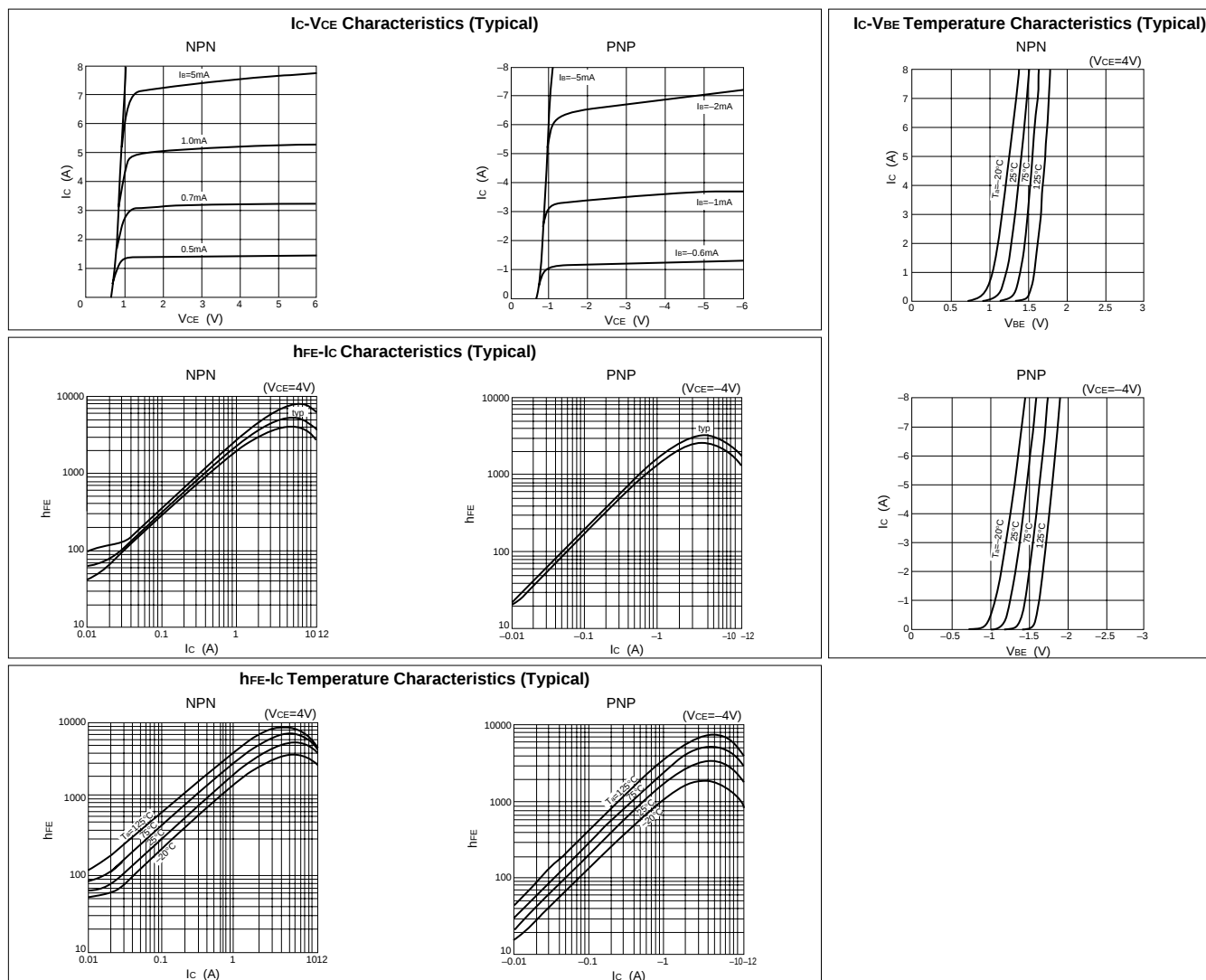
(Ta=25°C)

Symbol	Ratings		Unit
	NPN	PNP	
V _{CB0}	60	-60	V
V _{CEO}	60	-60	V
V _{EB0}	6	-6	V
I _C	8	-8	A
I _{CP}	12 (PW≤1ms, Du≤50%)	-12 (PW≤1ms, Du≤50%)	A
I _{FEC}	—	-8	A
I _{FECF}	—	-12	A
I _B	0.5	-0.5	A
P _T	5 (Ta=25°C) 25 (Tc=25°C)		W
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		
ICBO			10	μA	V _{CB} =60V			−10	μA	V _{CB} =−60V
IEBO			10	μA	V _{EB} =6V			−10	mA	V _{EB} =−6V
V _{CEO}	60			V	I _C =10mA	−60			V	I _C =−10mA
h _{FE}	2000	5000	12000		V _{CE} =4V, I _C =5A	2000	5000	12000		V _{CE} =−4V, I _C =−5A
V _{CE(sat)}			1.5	V	I _C =5A, I _B =10mA			−1.5	V	I _C =−5A, I _B =−10mA
V _{BE(sat)}			2.0	V				−2.0	V	
V _{FEC}		—		V				2.0	V	I _{FEC} =5A
t _{rr}		—		μs			1.0		μs	I _{FEC} =±0.5A
t _{on}		0.5		μs	V _{CC} ≐25V, I _C =5A, I _{B1} =−I _{B2} =10mA		0.5		μs	V _{CC} ≐−25V, I _C =−5A,
t _{stg}		2.0		μs			1.4		μs	
t _f		1.2		μs			0.6		μs	I _{B1} =−I _{B2} =−10mA
f _T		50		MHz			100		MHz	V _{CE} =−12V, I _E =1A
C _{ob}		100		pF	V _{CB} =10V, f=1MHz		130		pF	V _{CB} =−10V, f=1MHz

■ Characteristic curves

