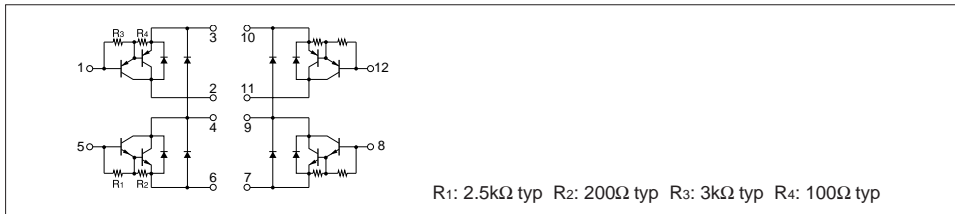


Absolute maximum ratings

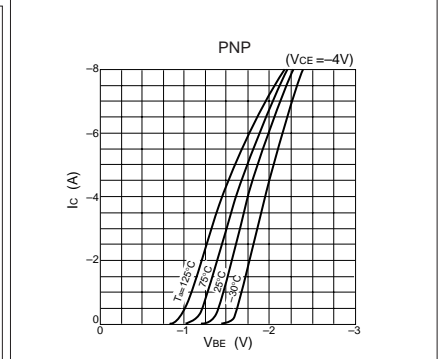
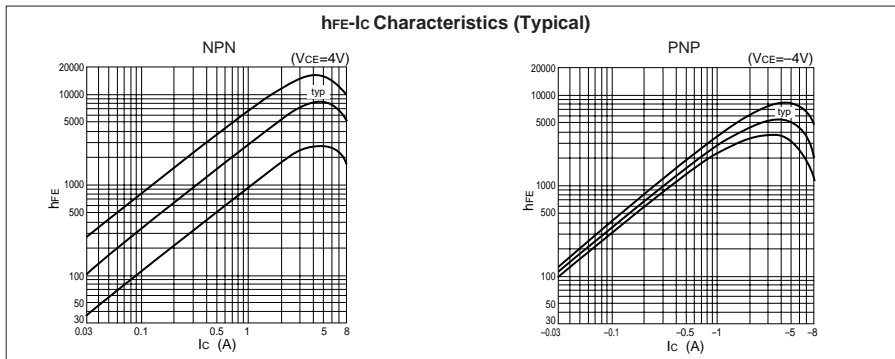
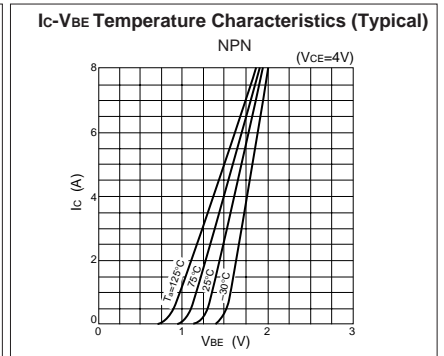
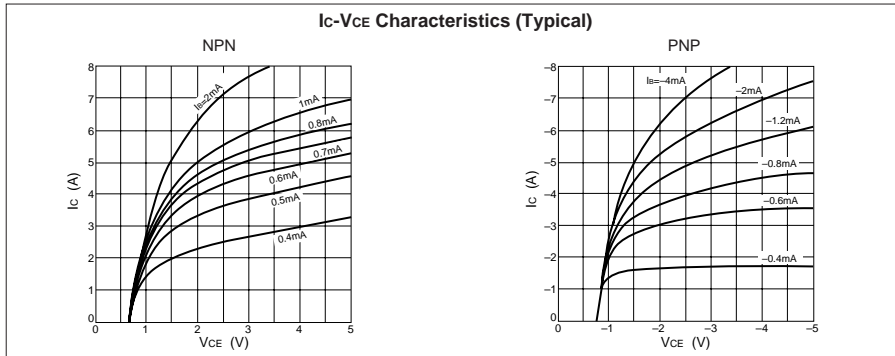
($T_a=25^\circ\text{C}$)

Symbol	Specification		Unit
	NPN	PNP	
V_{CBO}	100	-100	V
V_{CEO}	100	-100	V
V_{EBO}	6	-6	V
I_c	5	-5	A
I_{CP}	8 ($PW \leq 1\text{ms}, D_u \leq 50\%$)	-8 ($PW \leq 1\text{ms}, D_u \leq 50\%$)	A
I_B	0.5	-0.5	A
I_F	5 ($PW \leq 0.5\text{ms}, D_u \leq 25\%$)		A
I_{FSM}	8 ($PW \leq 10\text{ms}, \text{single}$)		A
V_R	120		V
P_T	5 ($T_a=25^\circ\text{C}$)		W
	25 ($T_c=25^\circ\text{C}$)		
V_{ISO}	1000 (Between fin and lead pin, AC)		V_{rms}
T_j	150		$^\circ\text{C}$
T_{stg}	-40 to +150		$^\circ\text{C}$
θ_{j-c}	5		$^\circ\text{C/W}$

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	$V_{CB}=100\text{V}$			-10	μA	$V_{CB}=-100\text{V}$
I_{EBO}			10	mA	$V_{EB}=6\text{V}$			-10	mA	$V_{EB}=-6\text{V}$
V_{CEO}	100			V	$I_C=10\text{mA}$	-100			V	$I_C=-10\text{mA}$
hFE	1000				$V_{CE}=4\text{V}, I_C=3\text{A}$	1000				$V_{CE}=-4\text{V}, I_C=-3\text{A}$
$V_{CE(sat)}$			1.5	V	$I_C=3\text{A}, I_B=6\text{mA}$			-1.5	V	$I_C=-3\text{A}, I_B=-6\text{mA}$

Diode for flyback voltage absorption

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

Symbol	Specification			Unit	Conditions
	min	typ	max		
V_R	120			V	$I_R=10\mu\text{A}$
V_F			1.2	V	$I_F=1\text{A}$
I_R			10	μA	$V_R=100\text{V}$

Characteristic curves

