

#### Absolute maximum ratings

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

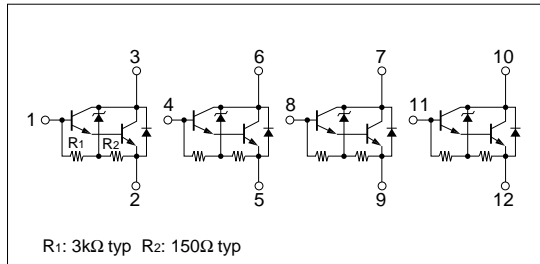
Symbol	Ratings	Unit
$V_{CB0}$	60±10	V
$V_{CE0}$	60±10	V
$V_{EB0}$	6	V
$I_C$	4	A
$I_{CP}$	6 (PW≤10ms, $D_u\leq 50\%$ )	A
$I_B$	0.5	A
$P_T$	5 ( $T_a=25^\circ\text{C}$ )	W
	40 ( $T_c=25^\circ\text{C}$ )	
$T_j$	150	$^\circ\text{C}$
$T_{stg}$	-40 to +150	$^\circ\text{C}$

#### Electrical characteristics

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

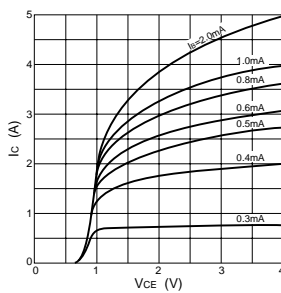
Symbol	Specification			unit	Conditions
	min	typ	max		
$I_{CB0}$			10	$\mu\text{A}$	$V_{CB}=50\text{V}$
$I_{EB0}$			10	mA	$V_{EB}=6\text{V}$
$V_{CE0}$	50	60	70	V	$I_C=10\text{mA}$
hFE	2000				$V_{CE}=4\text{V}$ , $I_C=3\text{A}$
$V_{CE(sat)}$			1.5	V	$I_C=3\text{A}$ , $I_B=10\text{mA}$

#### Equivalent circuit diagram

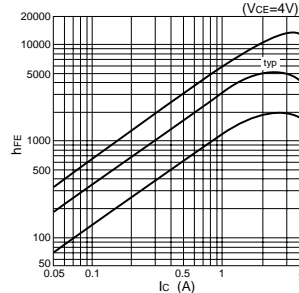


#### Characteristic curves

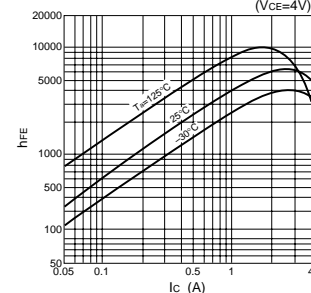
Ic-VCE Characteristics (Typical)



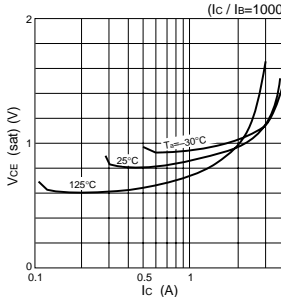
hFE-Ic Characteristics (Typical)



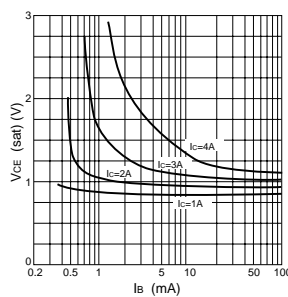
hFE-Ic Temperature Characteristics (Typical)



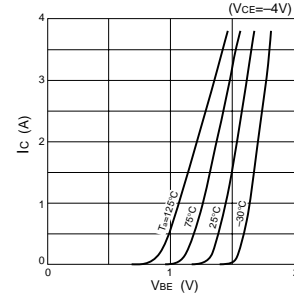
VCE(sat)-Ic Temperature Characteristics (Typical)



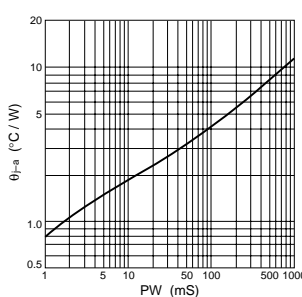
VCE(sat)-Ib Characteristics (Typical)



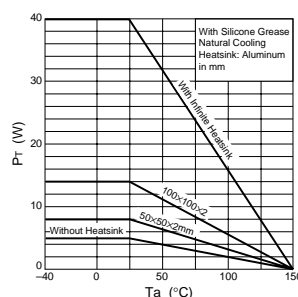
Ic-VBE Temperature Characteristics (Typical)



$\theta_{j-a}$ -PW Characteristics



$P_T$ -Ta Characteristics



Safe Operating Area (SOA)

