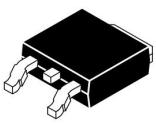
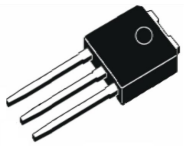
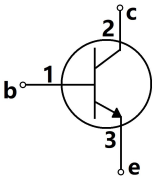
Features

- High DC Current Gain
- RoHS Product

Applications

- Power Driver applications



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Collector-Base voltage (I_E=0)	V_{CBO}	80	V
Collector-emitter voltage (I_B=0)	V_{CEO}	80	
Emitter-Base Voltage	V_{EBO}	5	
Collector Current (DC)	I_C	8	A
Collector Current (Pulse)	I_{CP}	16	
Base Current(DC)	I_B	1	
Collector Dissipation(Tc=25℃)	P_C	65	W
Collector Dissipation(Ta=25℃)	P_C	2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55~150	

*Pulse Test：Pulse Width=5.0 ms，Duty Cycle ＜10%

Electrical Characteristics (Tc =25°C unless otherwise specified)

Parameter	Symbol	Test Condition		Min	Type	Max	Unit
Collector Sustain Voltage	$V_{(sus)CEO}$	I_C=30mA,I_B=0A		80	-	-	V
Collector Cutoff Current	I_{CES}	V_{CE}=100V		-	-	400	μA
Collector Sustain Current	I_{CBO}	V_{CB}=60,I_E=0		-	-	700	
Emitter Sustain Current	I_{EBO}	V_{EB}=5V,Ic=0		-	-	1	mA
DC Current Gain	H_{FE}	V_{CE}=4V,I_C=0.3A	O	40	-	120	
			Y	120	-	210	
Collector-Emitter Saturation Voltage	$V_{CE(SET)}$	I_C=6A,I_B=0.6A		-	-	1.3	V
Base-Emitter Saturation Voltage	$V_{BE(SET)}$	I_C=6A,I_B=0.6A		-	-	2.0	
Maximum cut-off frequency	f_T	VCE=10V,Ic=0.5A,f=1MHZ		3.0	-	-	MHZ

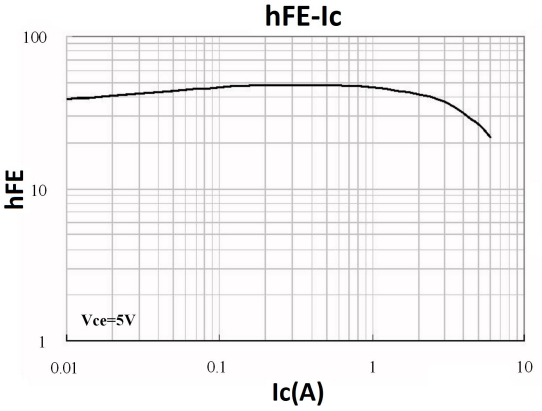
Thermal Characteristic

Parameter	Symbol	Value	Unit
Thermal Resistance Junction Ambient	Rth(j-a)	62.5	℃W
Thermal Resistance Junction Case	Rth(j-C)	1.923	℃/W

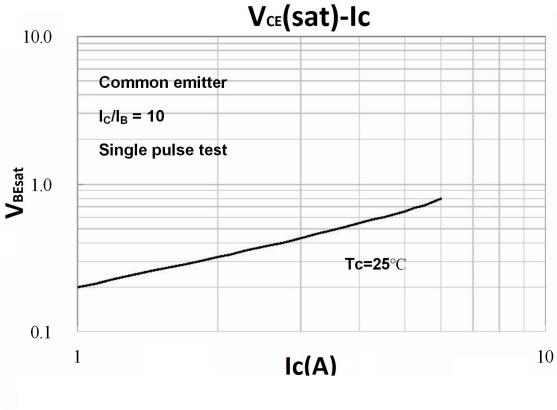
*Pulse Test:PW≦300ms,Duty Cycle≦2%

Typical Performance Characteristic

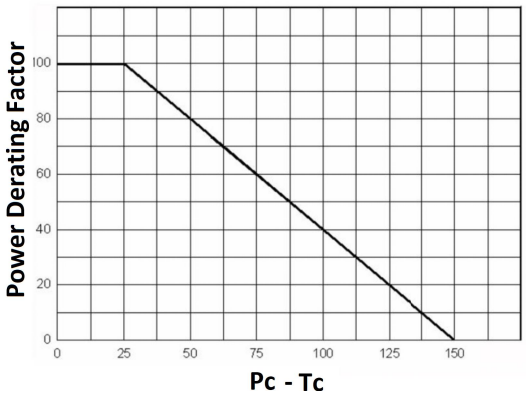
hFE-Ic



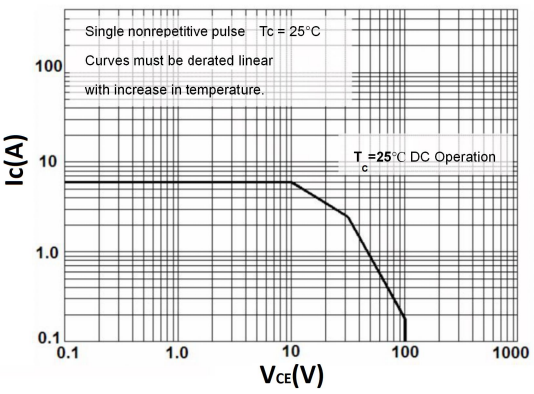
V_{CE}(sat)-Ic



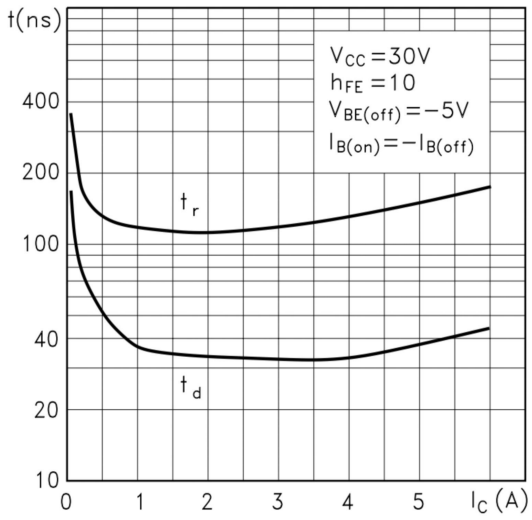
Pc-Ic



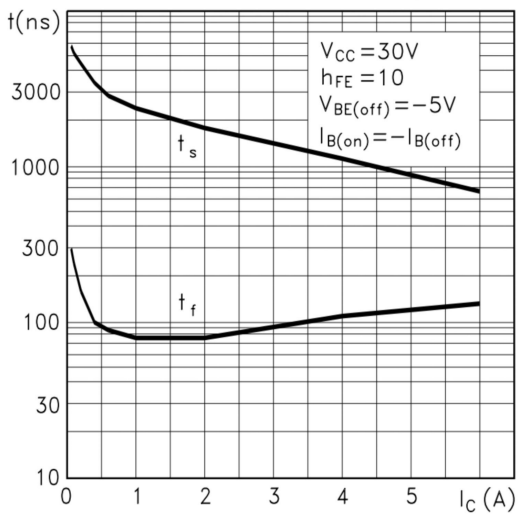
SOA



Resitive load switching time



Resitive load switching time



Package Mechanical Data