



## IGBT Discrete

$V_{CE}$	650	V
$I_C$	75	A
$V_{CE(SAT)}$ $I_C=75A$	1.65	V

### Circuit



### Applications

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### Features

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### Maximum Ratings

Parameter	Symbol	Value	Unit



# DGW75N65CTL1

RoHS  
COMPLIANT

## Electrical Characteristics of the IGBT ( )::

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
<b>Static</b>						

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
<b>Dynamic</b>						



## Switching Characteristic, Inductive Load

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
<b>Dynamic , at T<sub>J</sub>= 25</b>						
<b>Dynamic , at T<sub>J</sub>= 125</b>						
<b>Dynamic , at T<sub>J</sub>= 150</b>						

## Electrical Characteristics of the Diode ( )::

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
	<b>Static</b>					

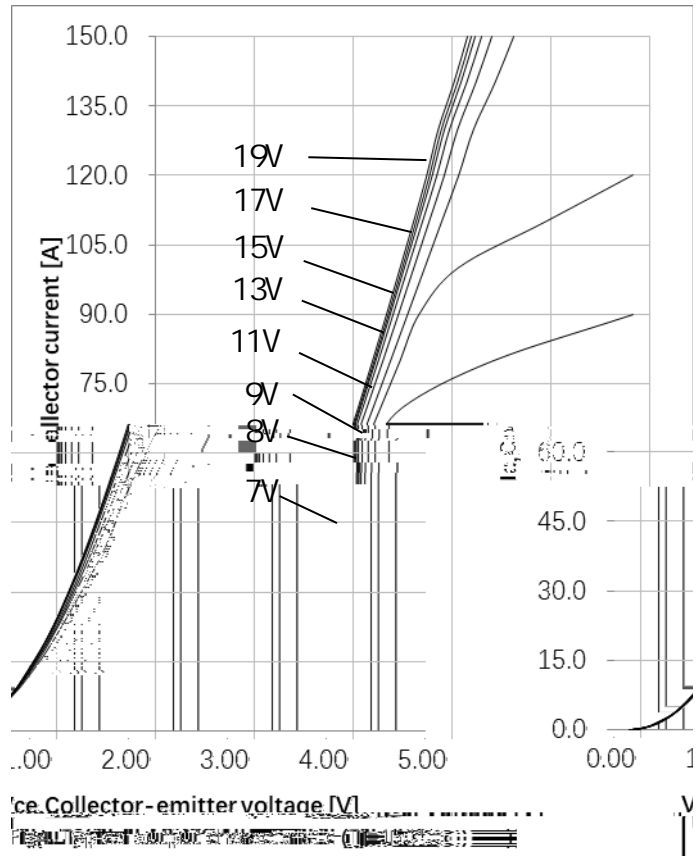
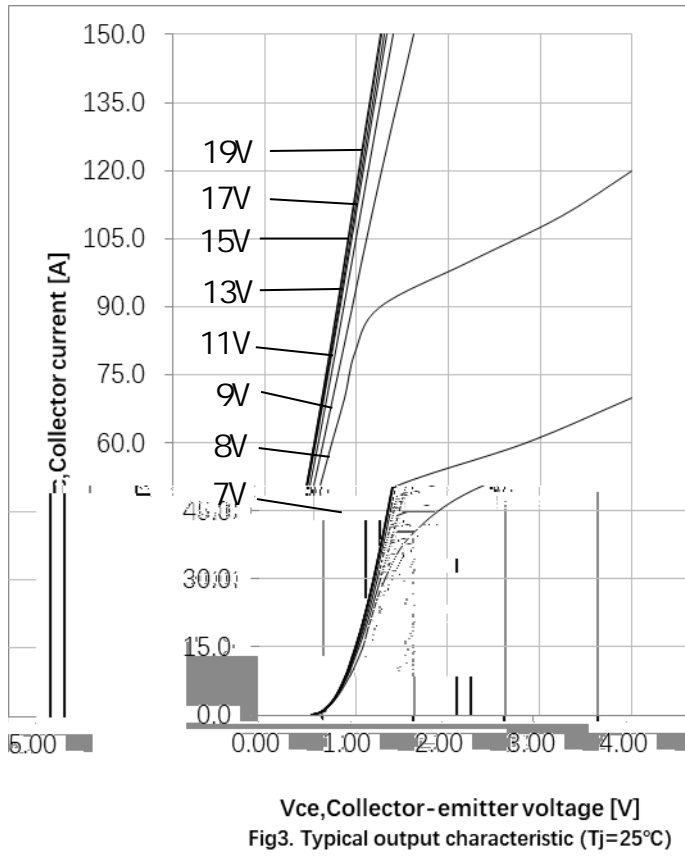
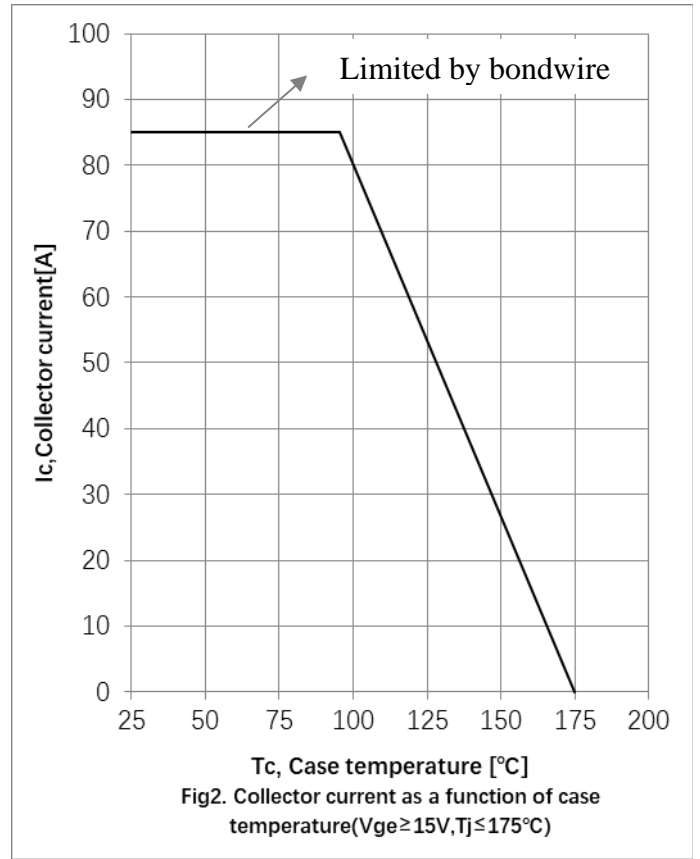
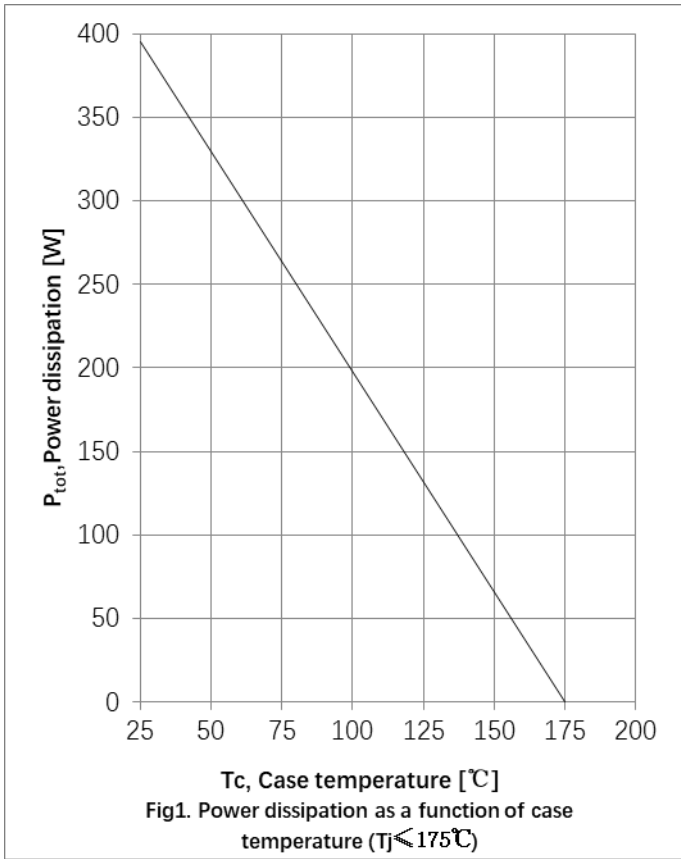


## Electrical Characteristics of the Diode

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Dynamic , at T <sub>j</sub> = 25						
Dynamic , at T <sub>j</sub> = 125						
Dynamic , at T <sub>j</sub> = 150						

## Thermal Resistance

Parameter	Symbol	Max. Value	Unit



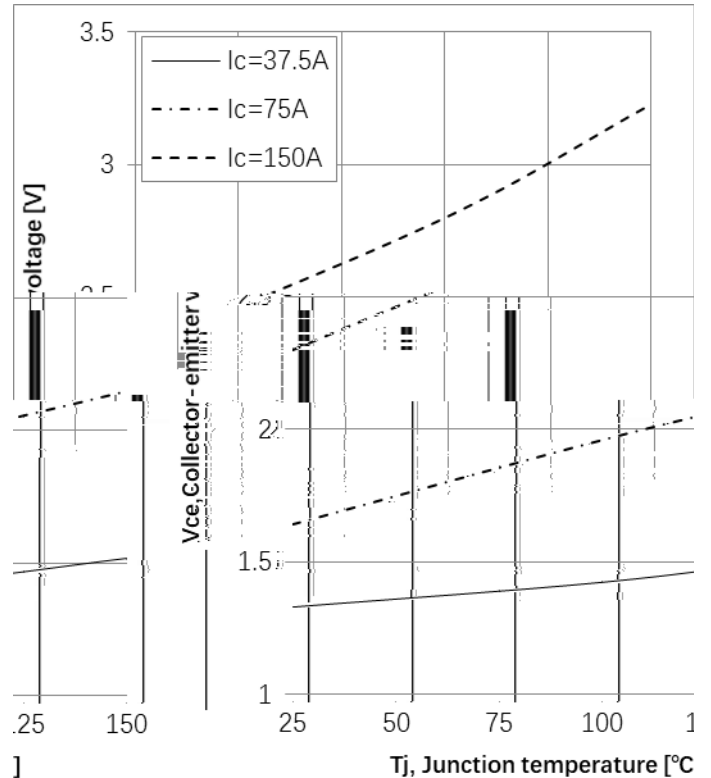
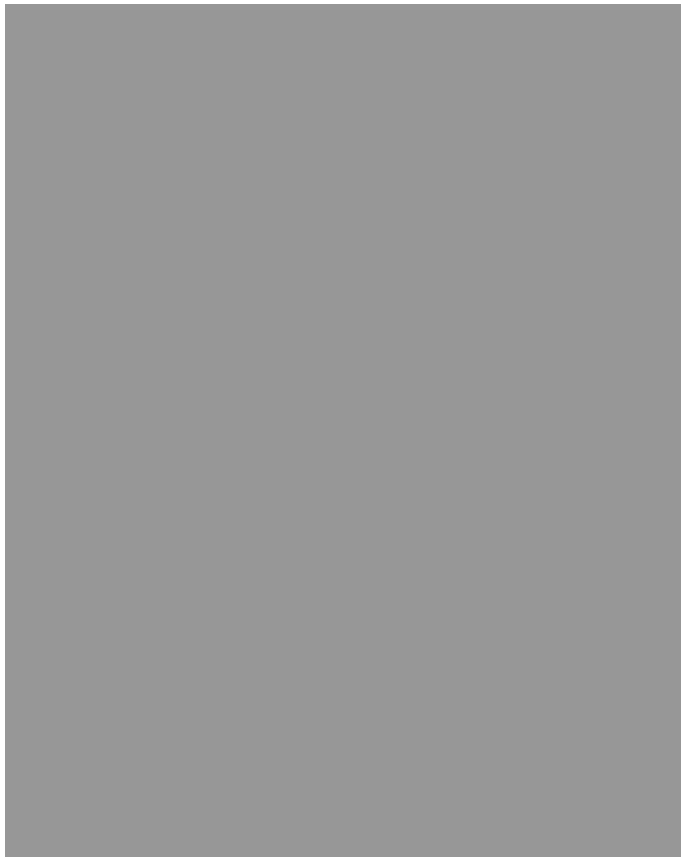


Fig6. Typical collector-emitter saturation voltage as a function of junction temperature ( $V_{ge}=15V$ )

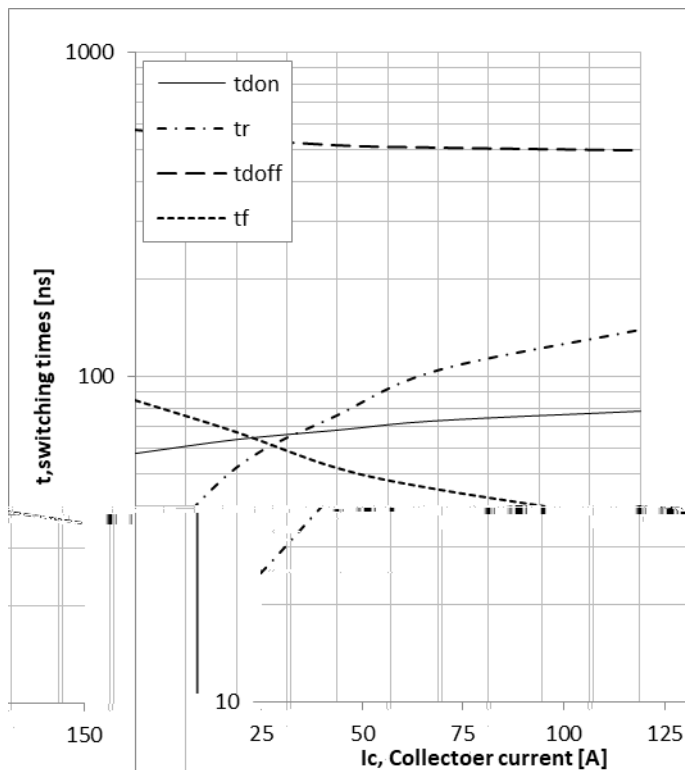


Fig7. Typical switching time as a function of collector current (inductive load,  $T_j=150^{\circ}C$ ,  $V_{ce}=300V$ ,  $V_{ge}=0/15V$ ,  $R_g=10\Omega$ )

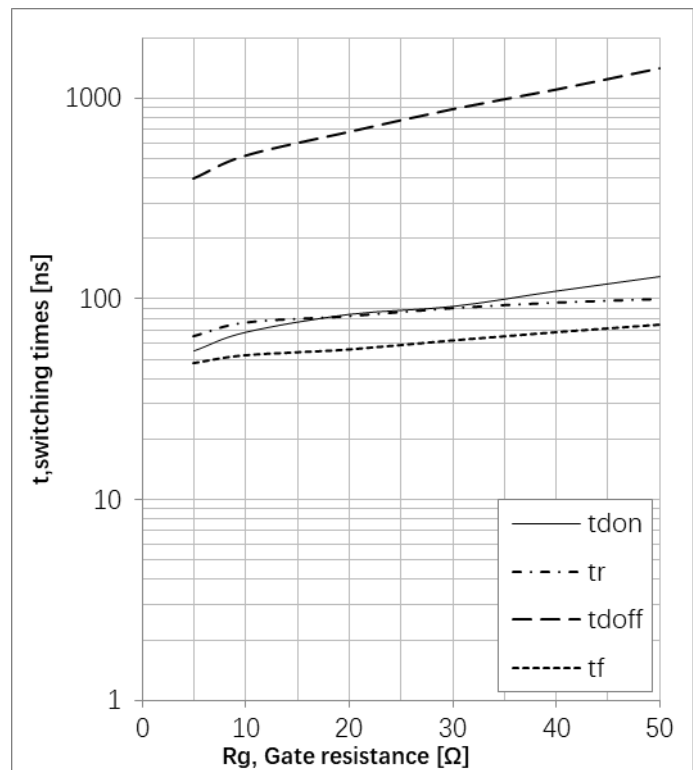
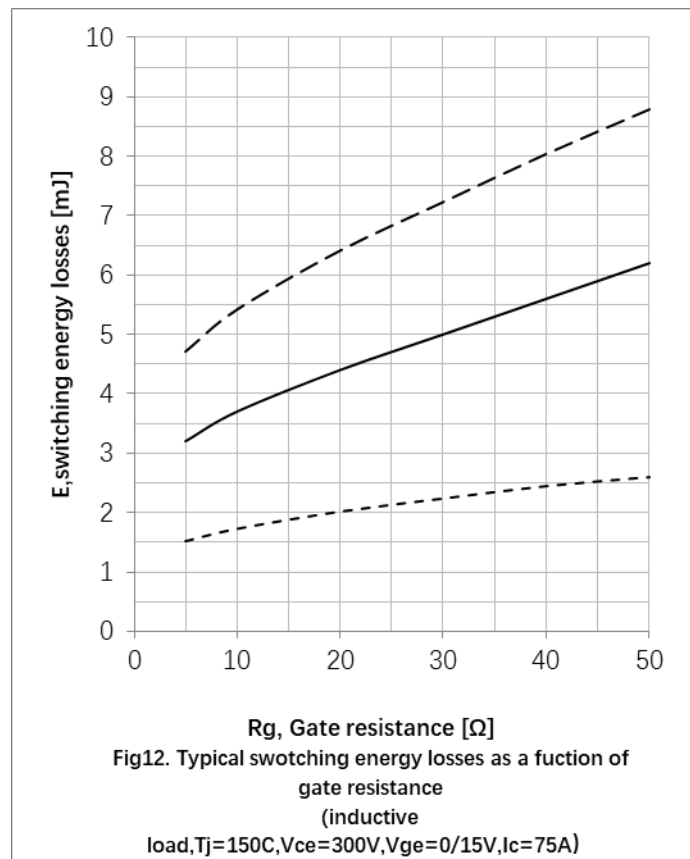
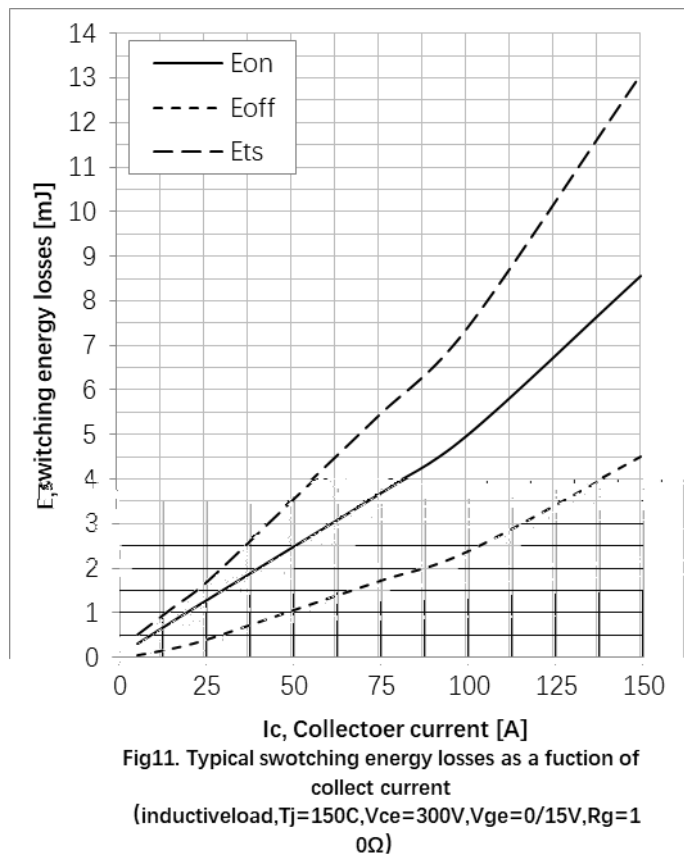
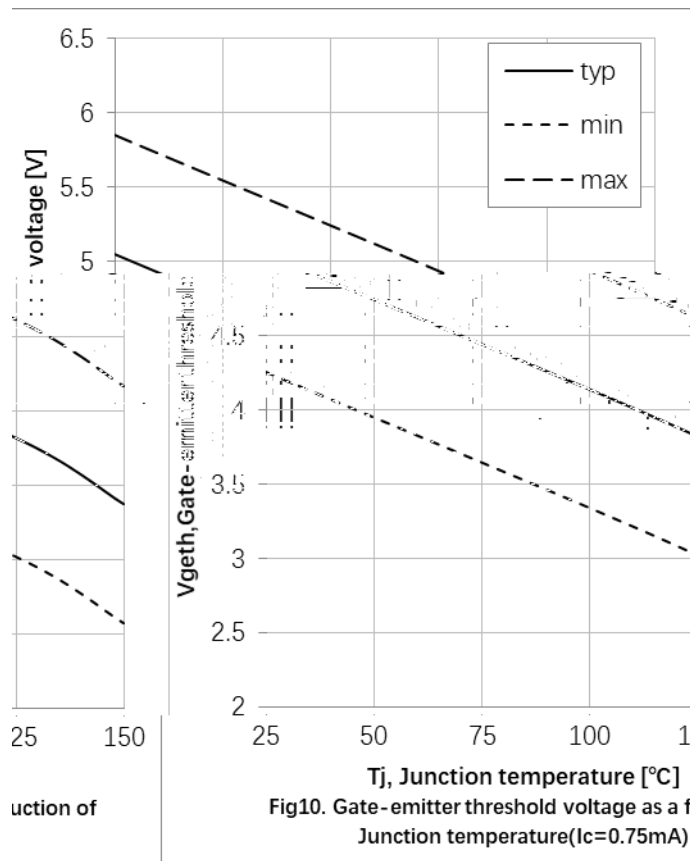
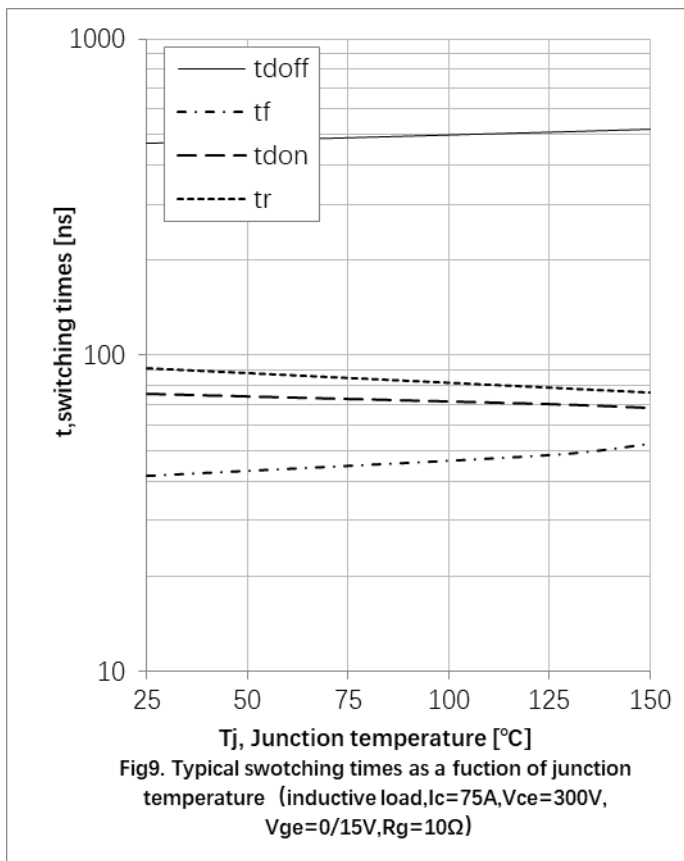


Fig8. Typical switching times as a function of gate resistance (inductive load,  $T_j=150^{\circ}C$ ,  $V_{ce}=300V$ ,  $V_{ge}=0/15V$ ,  $I_c=75A$ )



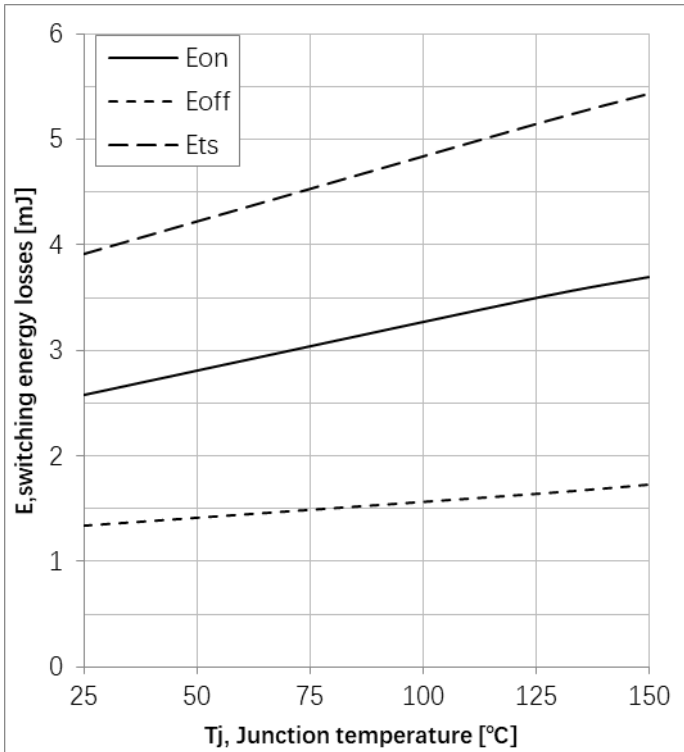


Fig13. Typical switching energy losses as a function of

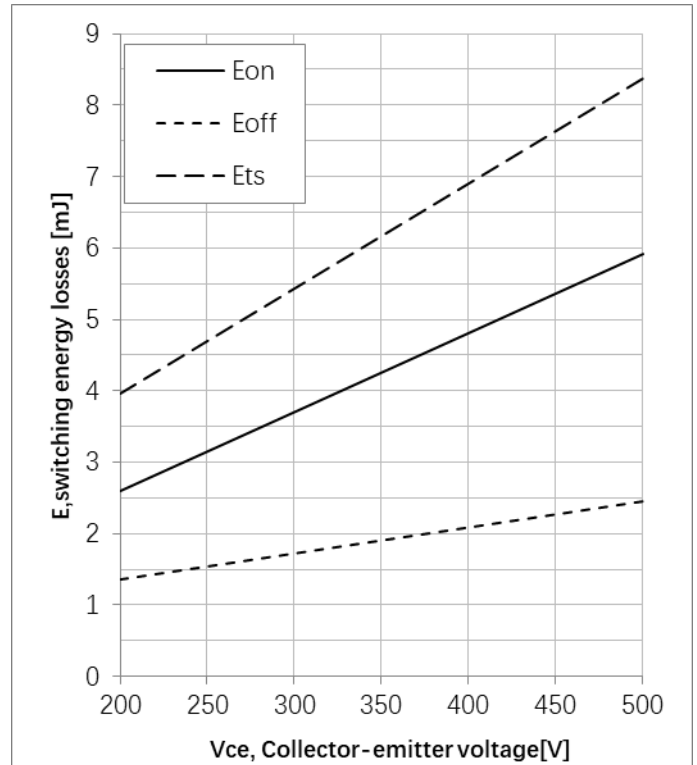


Fig14. Typical switching energy losses as a function of collector-emitter voltage (inductive load, T<sub>j</sub>=150°C, I<sub>c</sub>=75A, V<sub>ge</sub>=0/15V, R<sub>g</sub>=10Ω)

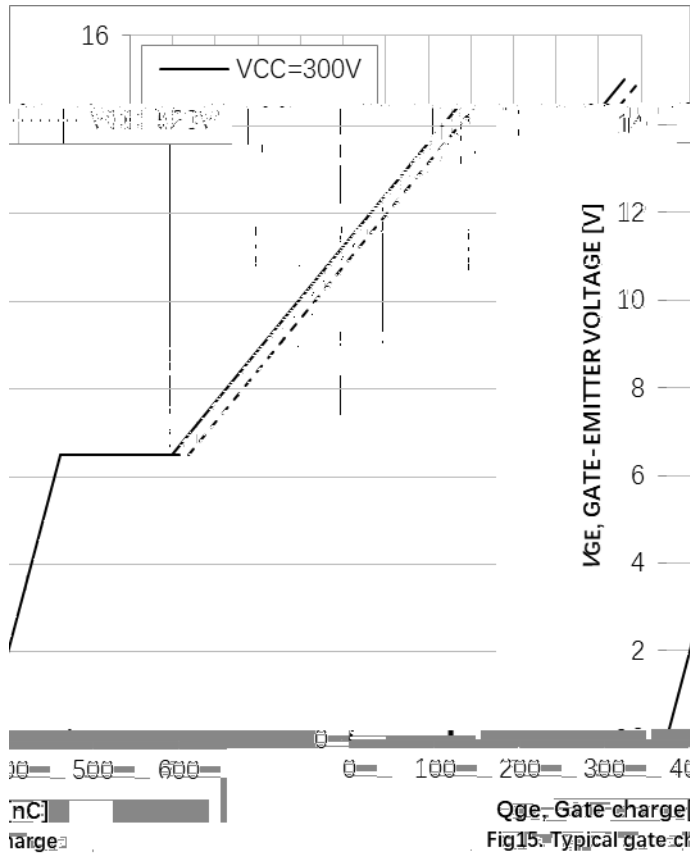


Fig15. Typical gate-charge

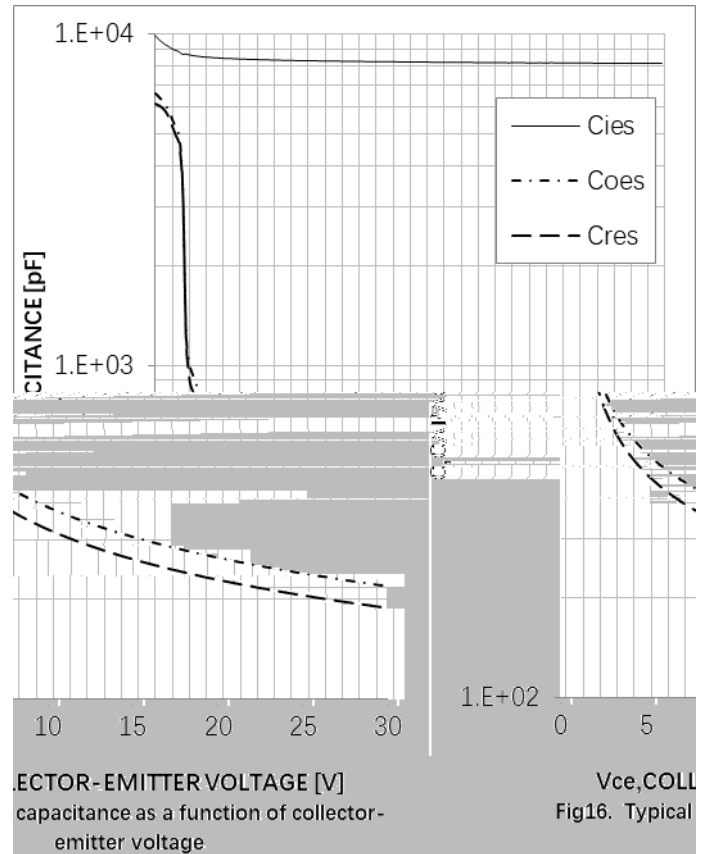


Fig16. Typical



