

## 富士 IGBT 模块 U 系列 短路电流和 $V_{GE}$ 特性 1200V

例如: 2MBI150UA-120, 2MBI200UB-120, 2MBI300UD-120

条件:  $V_{DC}=600V$   
 $+V_{GE}=8, 10, 13, 15, 18V$   
 $-V_{GE}=15V$   
 $T_j=125^{\circ}C$   
 $R_G$  (推荐值)=  $2.2\Omega$  (2MBI150UA-120)  
 $3.0\Omega$  (2MBI200UB-120)  
 $1.1\Omega$  (2MBI300UD-120)

结果:  $V_{GE} - I_{sc}$  特性 .....图 1  
 $I_{sc}$  的定义: 短路状况下的饱和电流

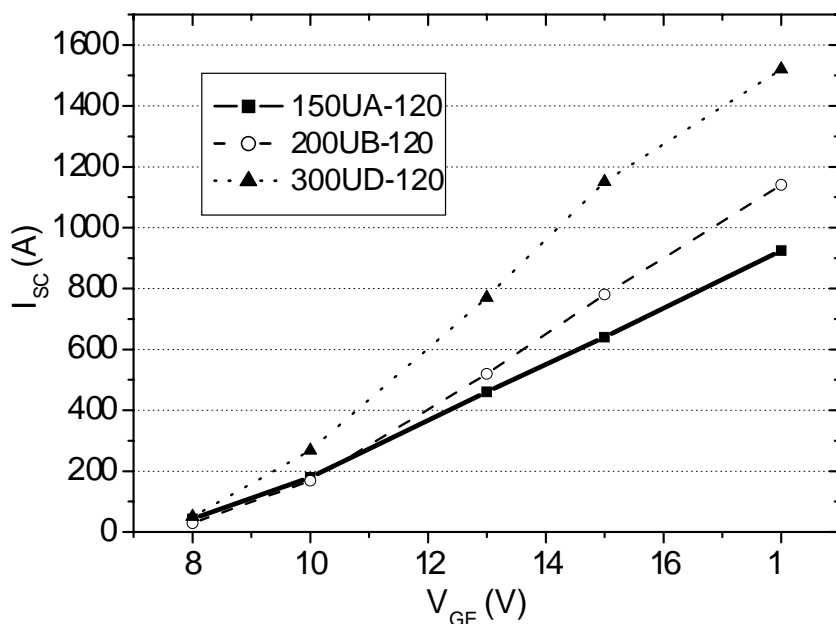
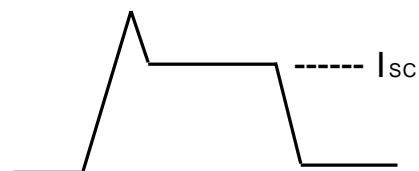


图 1  $V_{GE} - I_{sc}$  特性

波形 : 2MBI150UA-120 .....图 2~图 6  
 2MBI200UB-120 .....图 7~图 11  
 2MBI300UD-120 .....图 12~图 16

2MBI150UA-120

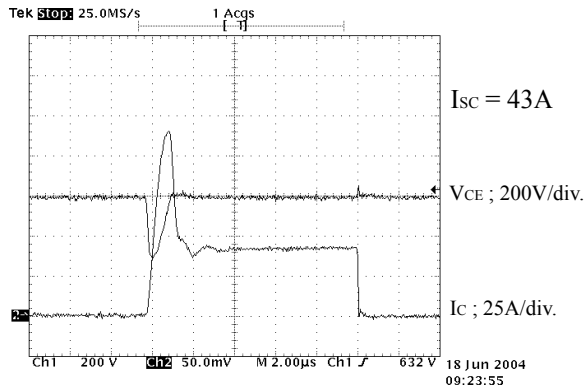


图 2  $V_{GE}=8V$

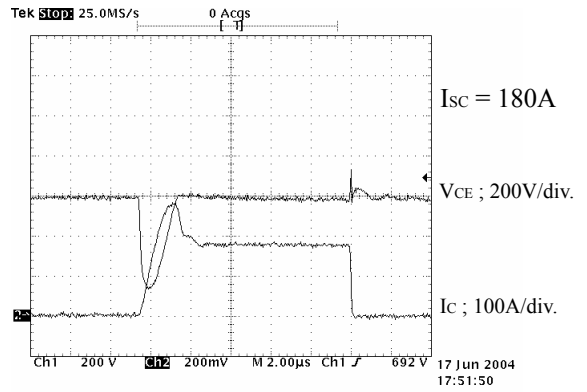


图 3  $V_{GE}=10V$

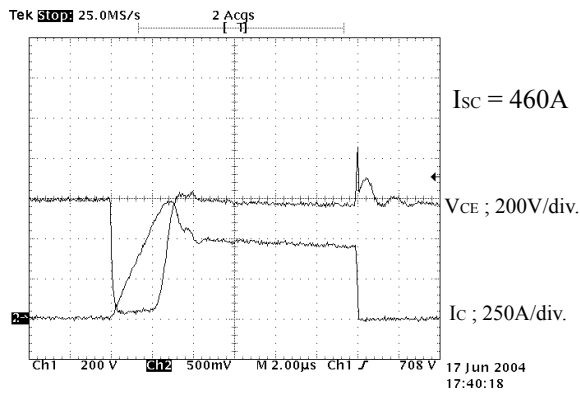


图 4  $V_{GE}=13V$

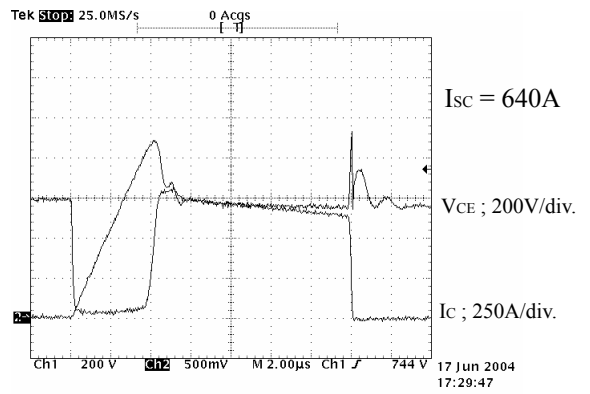


图 5  $V_{GE}=15V$

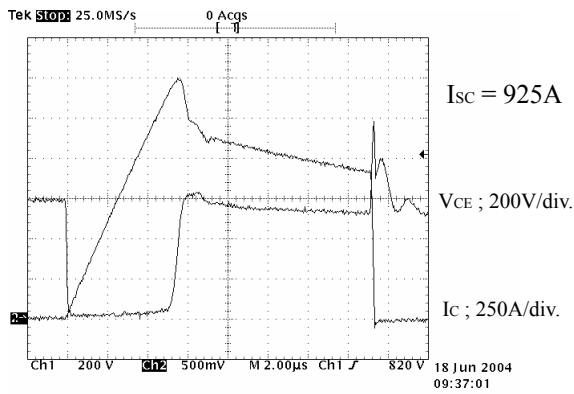


图 6  $V_{GE}=18V$

2MBI200UB-120

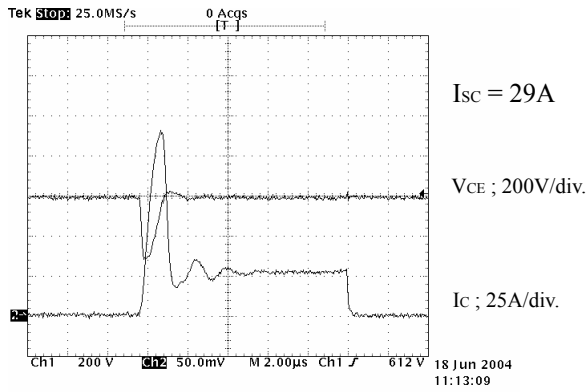


图 7  $V_{GE}=8V$

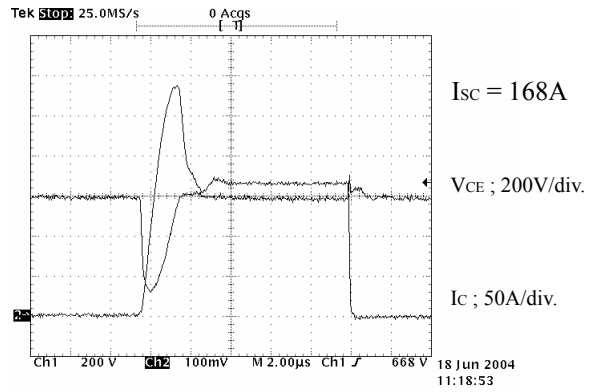


图 8  $V_{GE}=10V$

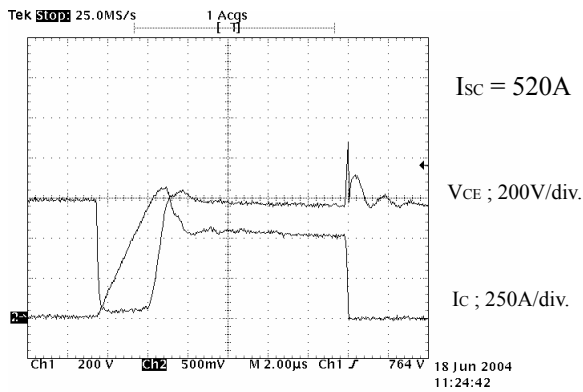


图 9  $V_{GE}=13V$

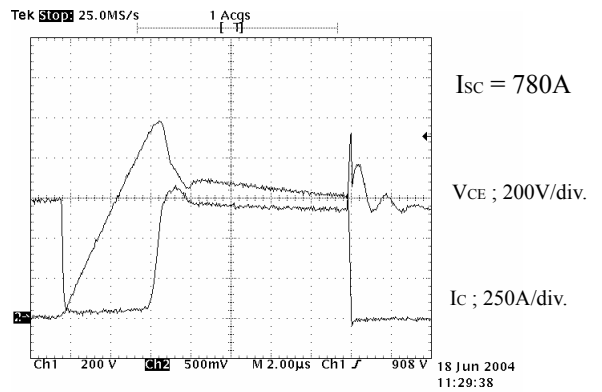


图 10  $V_{GE}=15V$

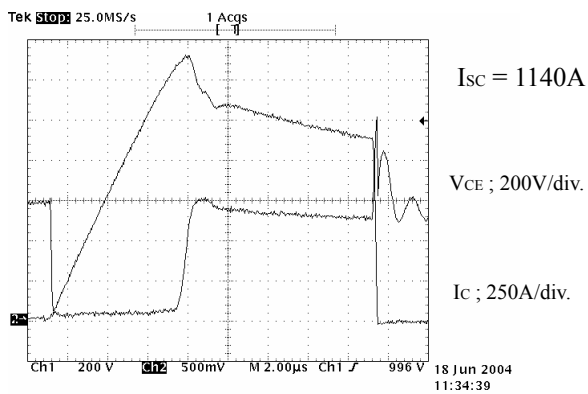


图 11  $V_{GE}=18V$

2MBI300UD-120

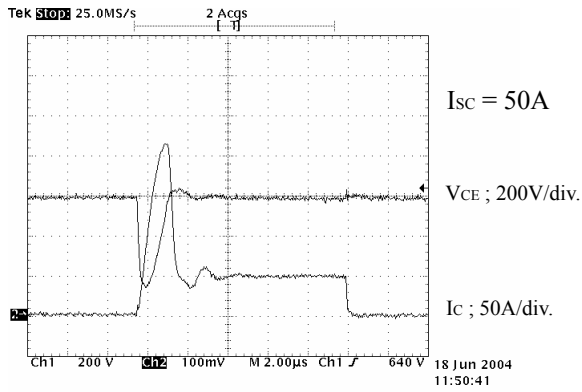


图 12 V<sub>GE</sub>=8V

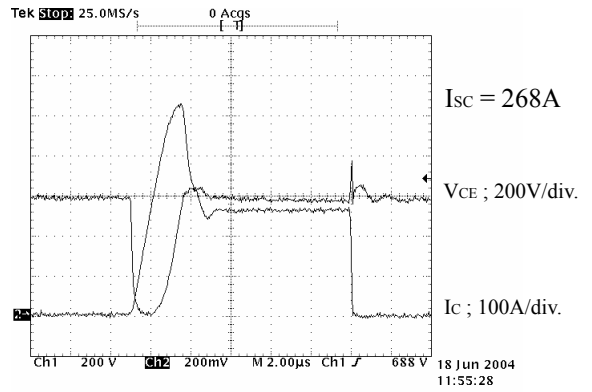


图 13 V<sub>GE</sub>=10V

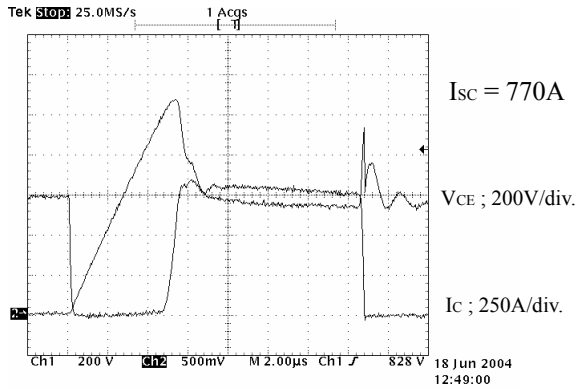


图 14 V<sub>GE</sub>=13V

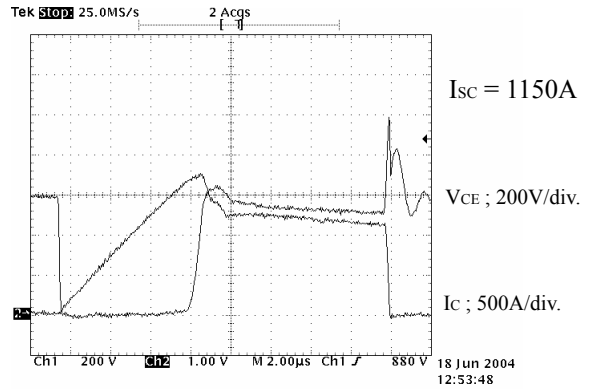


图 15 V<sub>GE</sub>=15V

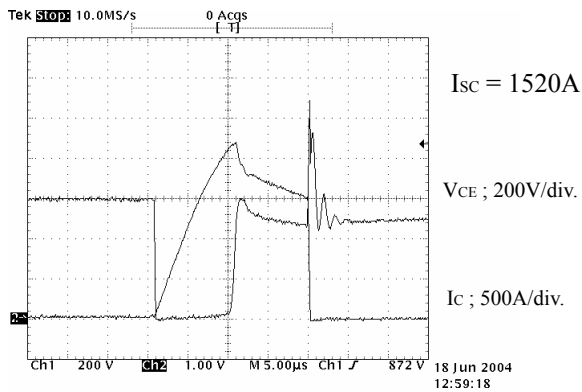


图 16 V<sub>GE</sub>=18V