

FUJI Small-IPM X-series

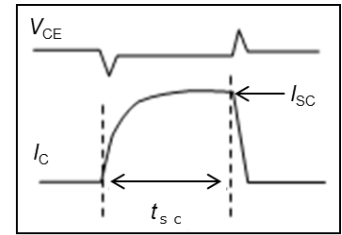
SCSOA

Conditions: $V_{CE}=400V$, $T_j=125^\circ C$, non-repetitive pulse

This document shows the short circuit capability dependency on control circuit voltage V_{CC} .

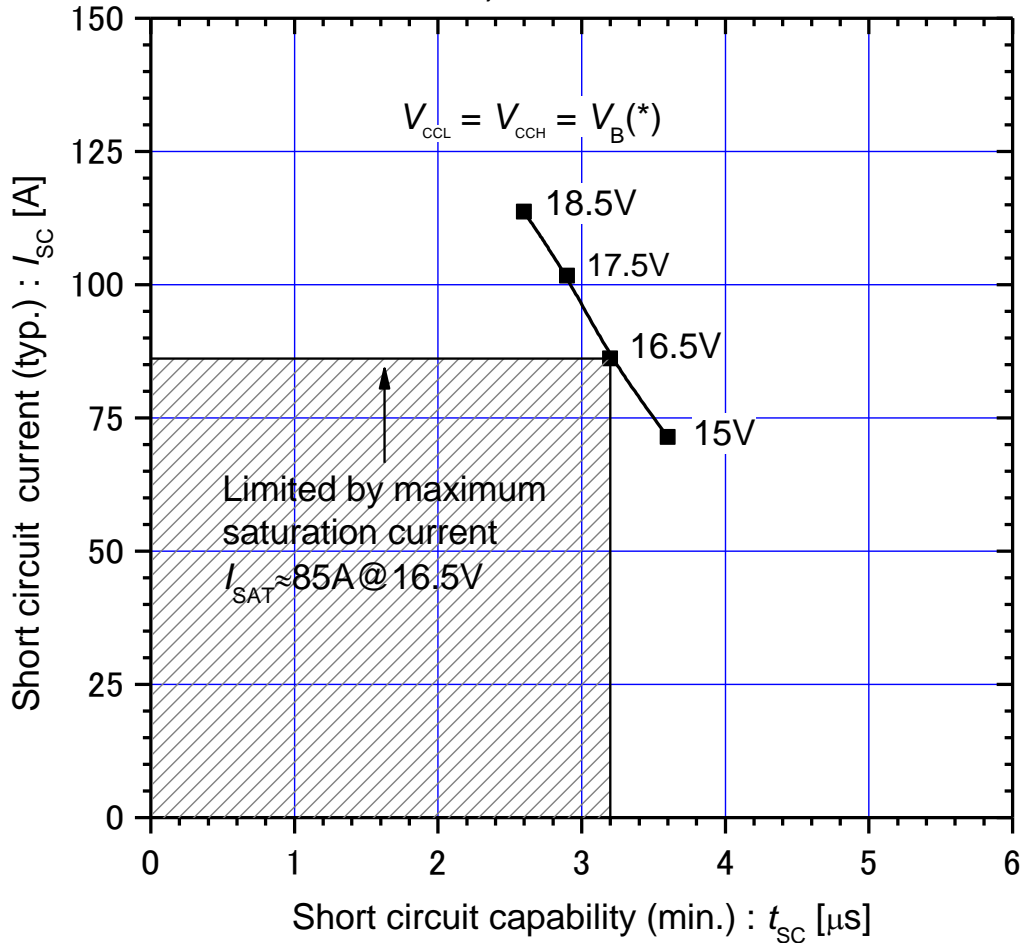
In the case of $V_{CCL}=V_{CCH}=V_B(^*)=16.5V$, 6MBP15XSD060-50 can safely shut down short circuit current that is about 5 times of its current rating under the conditions only if the IGBT conducting period is less than $3.2\mu s$. Since the SCSOA area varies depending on the input voltage V_{DC} , control voltage V_{CC} , junction temperature T_j , etc., please be careful to design with a suitable margin.

Type name: 6MBP15XSD060-50, 6MBP15XSD060-50-F1
 6MBP15XSF060-50, 6MBP15XSF060-50-F1



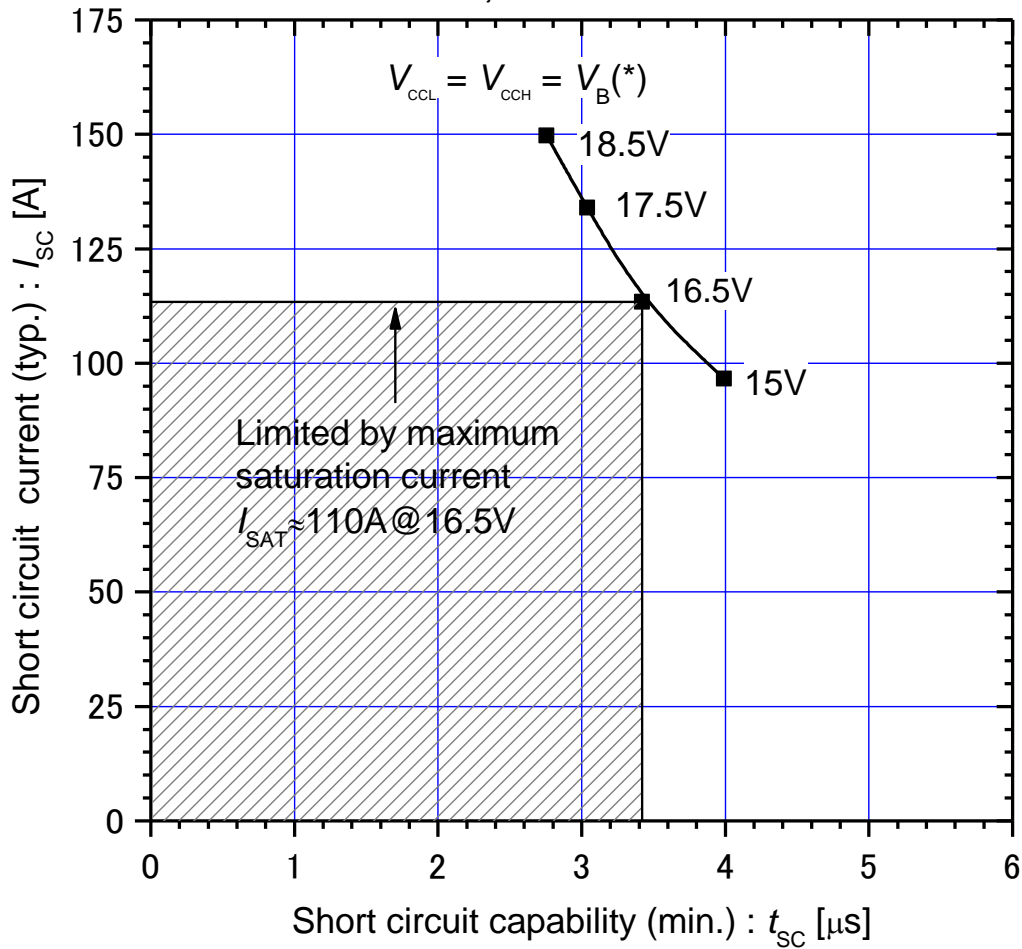
Actual result of Short circuit capability vs. Short circuit current

$I_{SC} = f(t_{SC}); V_{CE} = 400V, T_j = 125^\circ C$



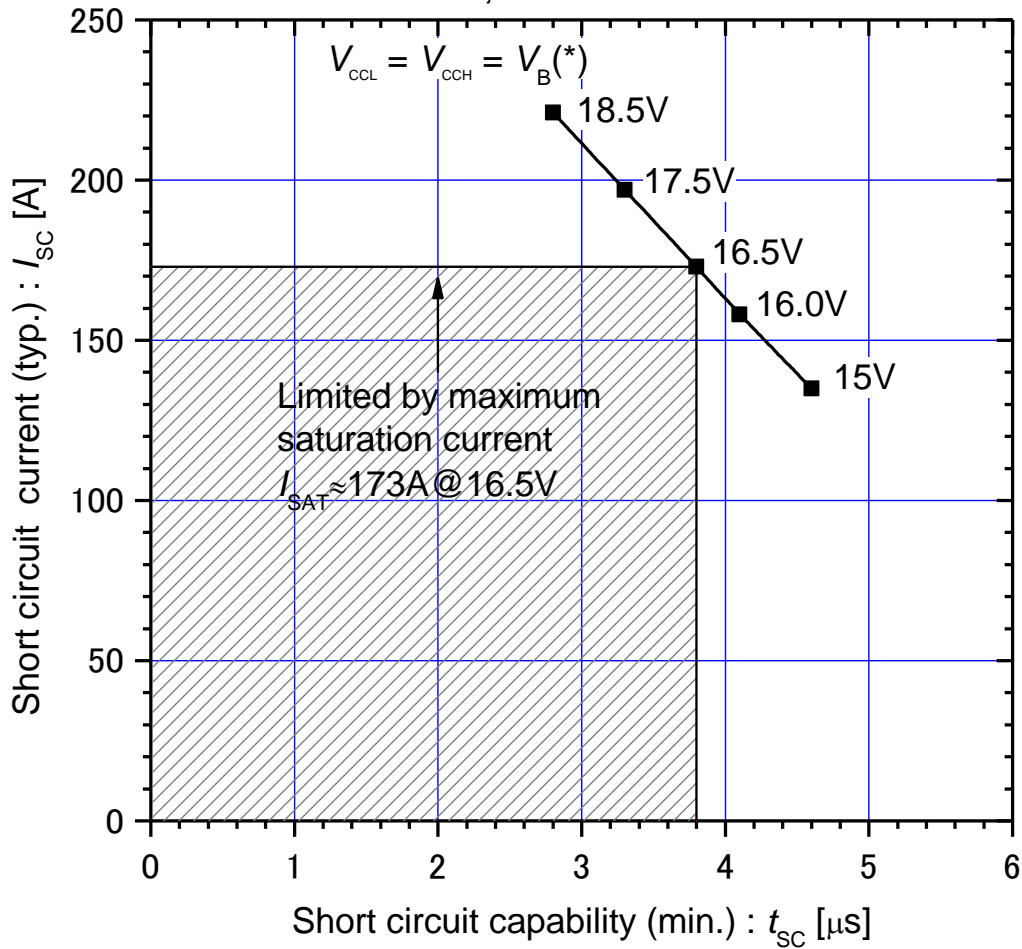
Type name: 6MBP20XSD060-50, 6MBP20XSD060-50-F1
 6MBP20XSF060-50, 6MBP20XSF060-50-F1

Actual result of Short circuit capability vs. Short circuit current
 $I_{SC} = f(t_{SC}); V_{CE} = 400V, T_j = 125^\circ C$



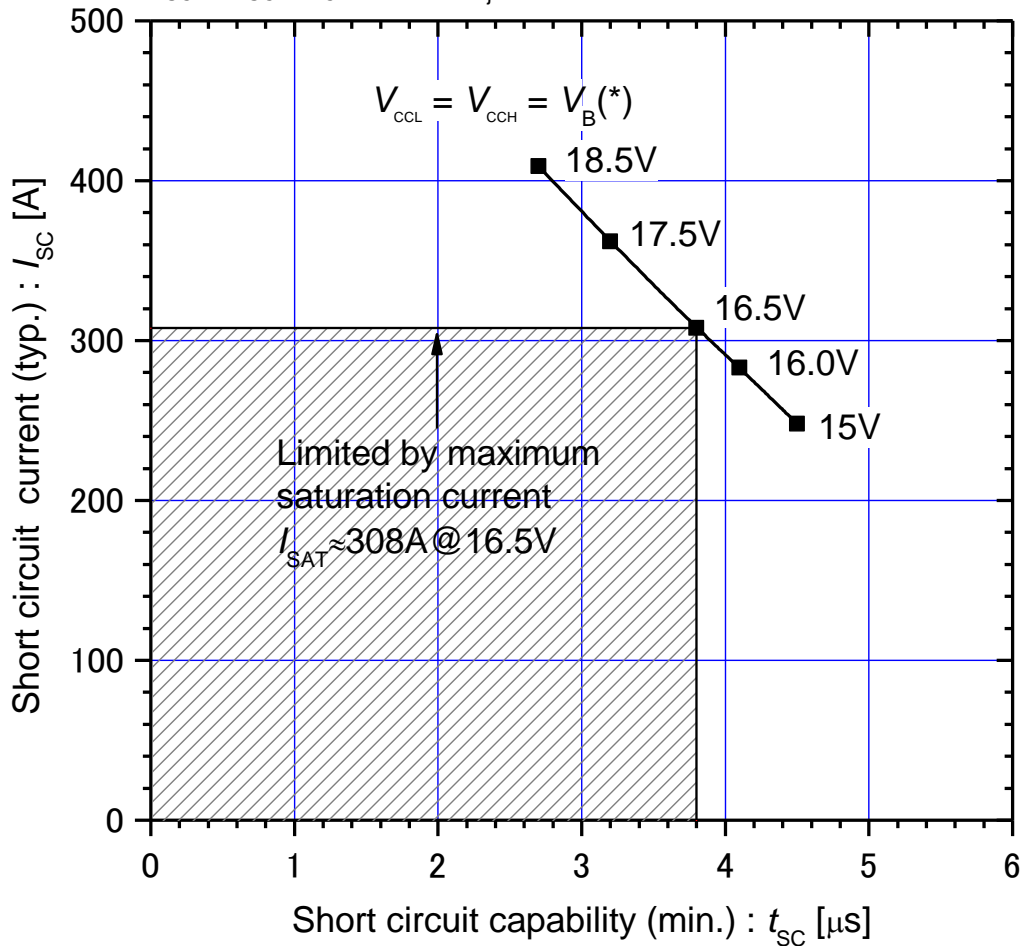
Type name: 6MBP30XSD060-50, 6MBP30XSD060-50-F1
 6MBP30XSF060-50, 6MBP30XSF060-50-F1

Actual result of Short circuit capability vs. Short circuit current
 $I_{SC} = f(t_{SC}); V_{CE} = 400V, T_j = 125^\circ C$



Type name: 6MBP35XSD060-50, 6MBP35XSD060-50-F1
 6MBP35XSF060-50, 6MBP35XSF060-50-F1

Actual result of Short circuit capability vs. Short circuit current
 $I_{SC} = f(t_{SC}); V_{CE} = 400V, T_j = 125^\circ C$



WARNING

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