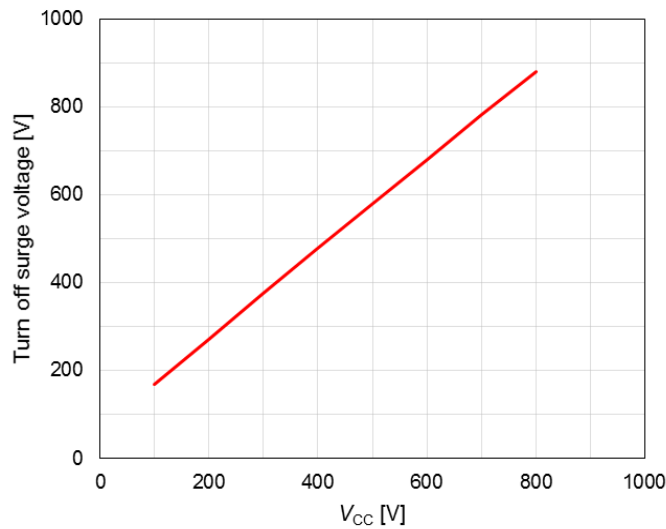


**Discrete IGBT FGW40N120HD
Surge Voltage Characteristics**

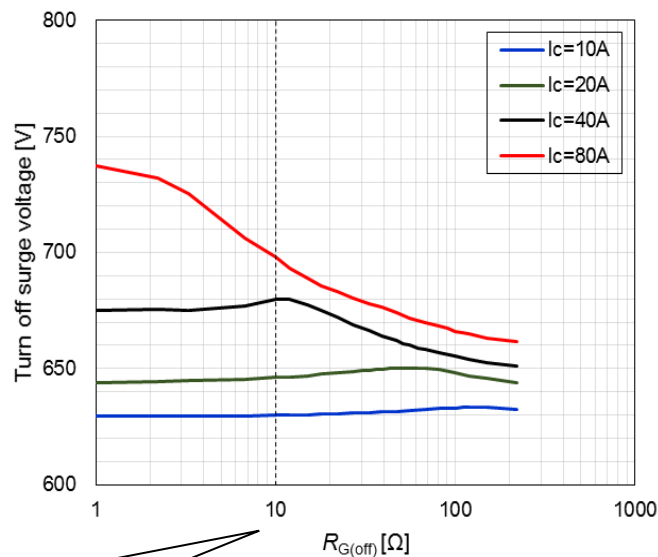
(1) Turn off surge voltage vs. Supply voltage (V_{CC})

Conditions: $V_{CC} = \text{var.}$, $I_C = 40\text{A}$, $V_{GE} = 15\text{V}/0\text{V}$, $R_{G(\text{off})} = 10\Omega$, $T_{vj} = \text{R.T.}$



(2) Turn off surge voltage vs. Gate resistance ($R_{G(\text{off})}$)

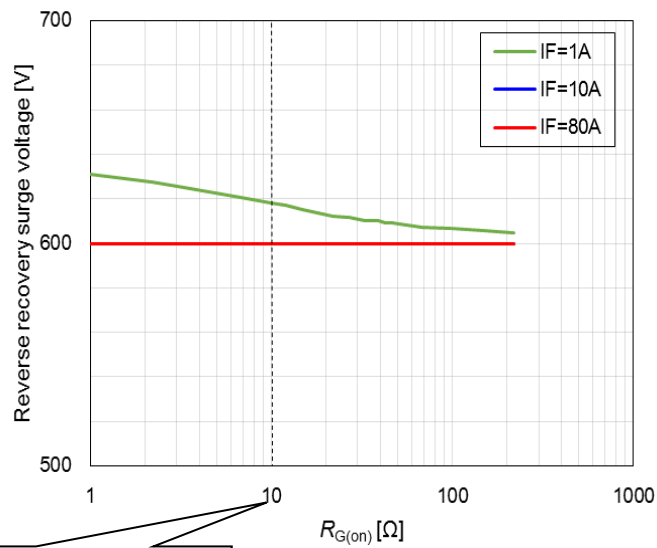
Conditions: $V_{CC} = 600\text{V}$, $I_C = 10\text{A}, 20\text{A}, 40\text{A}, 80\text{A}$, $V_{GE} = 15\text{V}/0\text{V}$, $R_{G(\text{off})} = \text{var.}$, $T_{vj} = \text{R.T.}$



$R_{G(\text{off})} = 10\Omega$
Described value on the datasheet

(3) Reverse recovery surge voltage vs. Gate resistance ($R_{G(on)}$)

Conditions: $V_{CC} = 600\text{ V}$, $I_F = 1\text{ A}, 10\text{ A}, 80\text{ A}$, $V_{GE} = 15\text{ V}/0\text{ V}$, $R_{G(on)} = \text{var.}$, $T_{vj} = \text{R.T.}$



$R_{G(on)} = 10\Omega$
Described value on the datasheet

Please use the data as a reference. Please confirm the characteristics by using actual equipment.

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