

# S Y M B O L S

Symbol	Description
$C_S$	Snubber capacitance
$E_{OFF}$	Turn-off energy losses
$E_{ON}$	Turn-on energy losses
$F_m$	Mounting force
$I_C$	IGBT nominal collector current
$I_{Cpulse}$	Pulsed collector current
$I_F$	Diode nominal mean forward current
$I_{FAVM}$	Max. average forward current (180° sine wave)
$I_{FSM}$	Max. surge peak forward current for a 180° sine wave; no voltage reapplied after surge
<b>I-pulse</b>	Peak current pulse
$I_{RM}$	Max. peak avalanche current for a single 180° sine wave pulse
$I_{rr}$	Max. (typ. for IGBT diode) reverse recovery current
$I_{TAVM}$	Max. average on-state current (180° sine wave)
$I_{TGQM}$	Max. turn-off current
$I_{TSM}$	Max. surge peak on-state current for a 180° sine wave; no voltage reapplied after surge
$P_{RSM}$	Max. surge avalanche power dissipation (single pulse)
$Q_{rr}$	Max. (typ. for IGBT diode) reverse recovery charge
$r_F$	Slope resistance
$r_T$	Slope resistance
$R_{thCH}$	Thermal resistance case to heatsink
$R_{thHA}$	Thermal resistance heatsink to ambient
$R_{thJC}$	Thermal resistance junction to case
$R_{thJH}$	Thermal resistance junction to heatsink
$T_C$	Case temperature
$T_m$	Max. temperature for continuous operation with max. mounting force
$t_{rr}$	Max. (typ. for IGBT diode) reverse recovery time
$T_{VJ}$	Junction temperature
$T_{VJM}$	Max. junction temperature

<b>Symbol</b>	<b>Description</b>
$V_C$	Max. isolation voltage
$V_{CES}$	IGBT collector emitter blocking voltage
$V_{CEsat}$	Collector-emitter saturation voltage
$V_{DC}$	Max. DC voltage rating for 100 FIT, 100% duty
$V_{DRM}$	Max. repetitive peak forward blocking voltage (50 Hz, 10 ms)
$V_{DSM}$	Max. surge peak forward blocking voltage (5 Hz, 10 ms and $T_{VJM}$ for PCTs)
$V_F$	Forward voltage drop
$V_{F0}$	Threshold voltage
$V_{Fmax}$	Max. forward voltage drop
$V_{Fmin}$	Min. forward voltage drop
$V_{GIN}$	Input voltage of IGCT gate drive
$V_{RM}$	Max. repetitive peak blocking voltage (50 Hz, 10 ms for BCTs)
$V_{RRM}$	Max. repetitive peak (reverse) blocking voltage (50 Hz, 10 ms)
$V_{SM}$	Max. surge peak blocking voltage (5 Hz, 10 ms and $T_{VJM}$ for BCTs)
$V_{RSM}$	Max. surge peak (reverse) blocking voltage (5 Hz, 10 ms and $T_{VJM}$ for PCTs)
$V_T$	On-state voltage drop
$V_{T0}$	Threshold voltage