

Features

- Uses CRM(CQ) advanced Trench MOS technology
- Extremely low on-resistance $R_{DS(on)}$
- Excellent $Q_g \times R_{DS(on)}$ product(FOM)

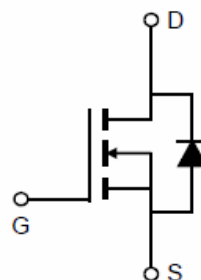
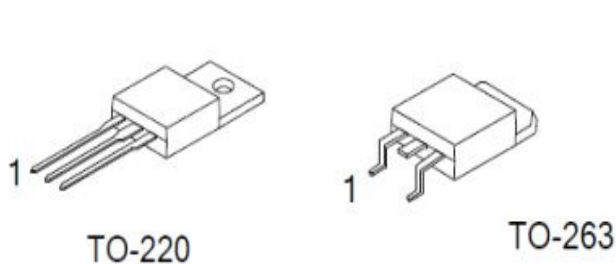
Product Summary

VDS	80V
$R_{DS(on)}@V_{GS}=10V$	6.7 mΩ
I_D	100A

Application

- Motor control and drive
- Battery management
- UPS (Uninterruptible Power Supplies)

Part ID	Package Type	Marking
SFP100N80C	TO-220	100N80C
SFB100N80C	TO-263	100N80C



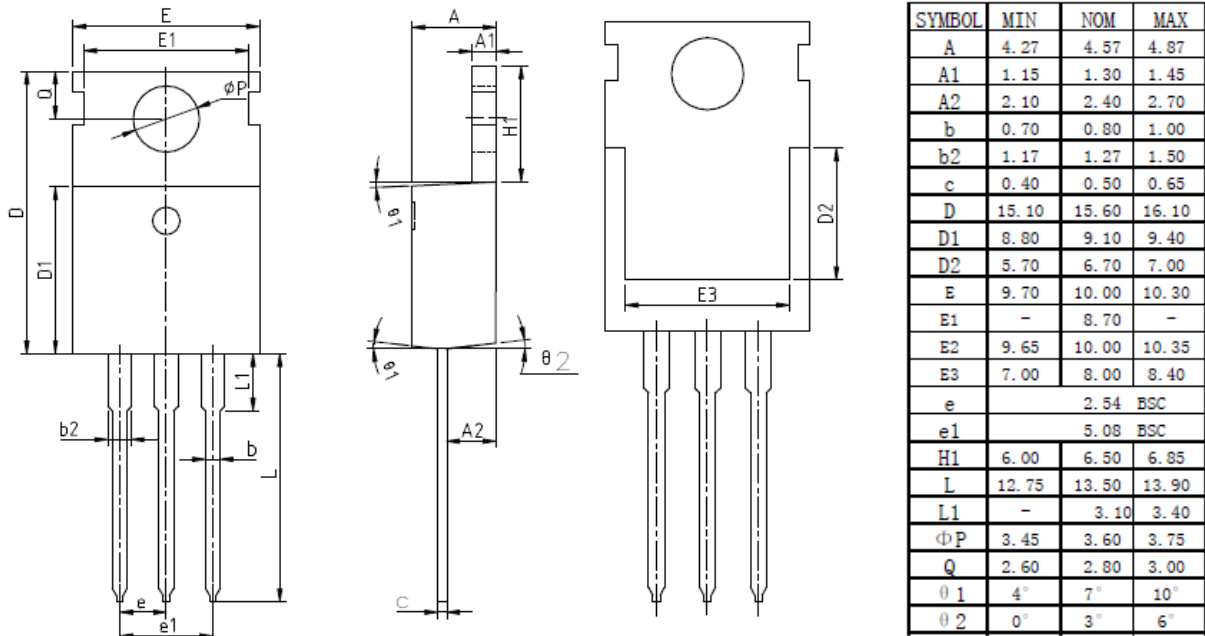
Electrical Characteristic (at $T_j = 25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	Value			Unit	Test Condition
		min.	typ.	max.		

Static Characteristic (CP test)

Drain-source breakdown voltage	BV_{DSS}	80	-	-	V	$V_{GS}=0V, I_D=250\mu A$
Gate threshold voltage	$V_{GS(th)}$	2.5	3	3.5	V	$V_{DS}=V_{GS}, I_D=250\mu A$
Zero gate voltage drain current	I_{DSS}	-	30	100	nA	$V_{DS}=64V, V_{GS}=0V$ $T_j=25^\circ\text{C}$
		-	-	-		$T_j=125^\circ\text{C}$
Gate-source leakage current	I_{GSS}	-	10	100	nA	$V_{GS}=25V, V_{DS}=0V$
Drain-source on-state resistance	$R_{DS(on)}^*$	-	6.7	8.6	mΩ	$V_{GS}=10V, I_D=40A,$ $T_j=25^\circ\text{C}$
		-	-	-		$T_j=125^\circ\text{C}$

Note: * $R_{DS(on)}$ states here is not CP testing value, but package level testing value with chip assembled in TO220 type using 2*20mil double-stitch source wire bond.

PACKAGE DIMENSION
TO-220

TO-263
