

DESCRIPTION

- High Current Handling Capability
- Optimized for Low Switching Losses
- Low Gate Drive Requirement

APPLICATIONS

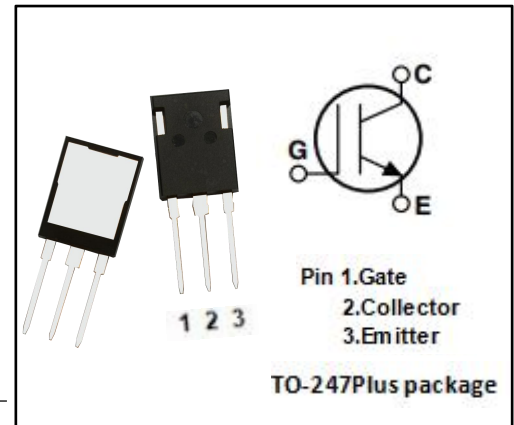
- UPS
- SMPS
- Motor Drives

ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	650	V
V_{GES}	Gate-Emitter Voltage	± 20	V
I_C	Collector Current-Continuous @ $T_C = 25^\circ\text{C}$	480	A
I_C	Collector Current-Continuous @ $T_C = 110^\circ\text{C}$	200	A
I_{CM}	Pulsed Collector Current	1100	A
P_D	Power Dissipation @ $T_C = 25^\circ\text{C}$	1630	W
T_J	Operating Junction Temperature	$-55 \sim 175$	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	$-55 \sim 175$	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance	0.092	$^\circ\text{C}/\text{W}$



DIM	mm		
	MIN	TYP.	MAX
A	19.80	20.65	21.50
B	15.40	15.65	15.90
C	4.70	5.00	5.30
D	0.90	1.08	1.26
G	2.70	3.00	3.30
H	3.90	4.05	4.20
J	0.50	0.60	0.70
K	19.50	20.00	20.50
L	1.90	2.05	2.20
N	10.80	10.90	11.00
Q	6.00	6.15	6.30
R	2.90	3.10	3.30
S	1.80	2.00	2.20
T	2.15	2.25	2.35
W	4.90	5.00	5.10

STATIC CHARACTERISTICS (T_J = 25 °C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{CES}	Collector-Emitter Breakdown Voltage	V _{GE} =0, I _C = 0.25mA	650	--	--	V
V _{GE(th)}	Gate-Emitter Threshold Voltage	V _{GE} = V _{CE} , I _C = 4mA	4.0	--	6.5	V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 160A, V _{GE} = 15V	--	1.4	1.7	V
		I _C = 160A, V _{GE} =15V T _J = 150 °C	--	1.6	--	
I _{CES}	Zero Gate Voltage Collector Current	V _{CE} = 650V, V _{GE} =0	--	--	25	uA
		V _{CE} = 650V, V _{GE} =0 T _J = 150 °C	--	--	2	mA
I _{GES}	Gate-Emitter Leakage Current	V _{GE} = ±20V, V _{CE} =0	--	--	±200	nA

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