查询IXSH15N120A供应商 捷多邦，专业PCB打样工厂，24小时加急出货

IXYS

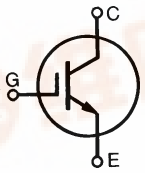
Preliminary Data Sheet

IXSH15N120A

I_{C25} = 30 A
V_{CES} = 1200 V
$V_{CE(sat)}$ = 4.0 V

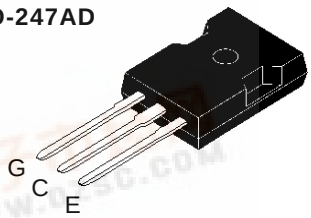
IGBT

"S" Series - Improved SCSOA Capability



Symbol	Test Conditions	Maximum Ratings	
V_{CES}	T_J = 25°C to 150°C	1200	V
V_{CGR}	T_J = 25°C to 150°C; R_{GE} = 1 MΩ	1200	V
V_{GES}	Continuous	±20	V
V_{GEM}	Transient	±30	V
I_{C25}	T_C = 25°C	30	A
I_{C90}	T_C = 90°C	15	A
I_{CM}	T_C = 25°C, 1 ms	60	A
SSOA (RBSOA)	V_{GE} = 15 V, T_J = 125°C, R_G = 82 Ω Clamped inductive load, L = 100 µH	I_{CM} = 30 @ 0.8 V_{CES}	A
t_{sc}	T_J = 125ºC, V_{CE} = 720 V; V_{GE} = 15V, R_G = 82Ω	5	µs
P_C	T_C = 25°C	150	W
T_J		-55 ... +150	°C
T_{JM}		150	°C
T_{STG}		-55 ... +150	°C
M_d	Mounting torque	1.15/10	Nm/lb-in.
Weight		6	g
Max. Lead Temperature for Soldering (1.6mm from case for 10s)		300	°C

TO-247AD



Features

- 2nd generation HDMOS™ process
  Low $V_{CE(sat)}$
  - for minimum on-state conduction losses
- MOS Gate turn-on
  - drive simplicity

Applications

- AC motor speed control
- DC servo and robot drives
- Uninterruptible power supplies (UPS)
- Switched-mode and resonant-mode power supplies
- DC choppers

Advantages

- Easy to mount (isolated mounting hole)
- Reduces assembly time and cost

Symbol (T_J = 25°C unless otherwise specified)	Test Conditions	Characteristic Values Min.	Typ.	Max.	
BV_{CES}	I_C = 3.0 mA, V_{GE} = 0 V	1200			V
$V_{GE(th)}$	I_C = 1.5 mA, V_{CE} = V_{GE}	4		8	V
I_{CES}	V_{CE} = 0.8 V_{CES}, V_{GE} = 0 V Note 2	T_J = 25°C T_J = 125°C		200 1	µA mA
I_{GES}	V_{CE} = 0 V, V_{GE} = ±20 V			± 100	nA
$V_{CE(sat)}$	I_C = I_{C90}, V_{GE} = 15 V			4.0	V

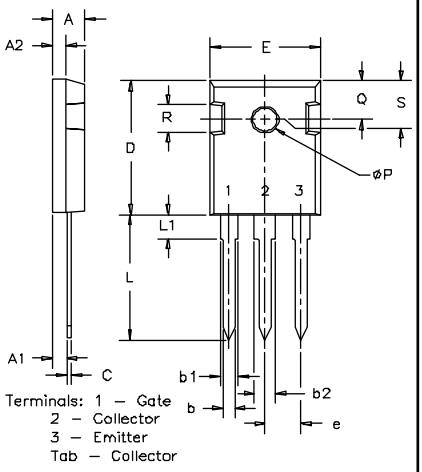
找PDF 下 pdf.dzsc.com

©1996 IXYS Corporation - All rights reserved

Symbol	Test Conditions (T_J = 25°C unless otherwise specified)	Characteristic Values Min	Typ.	Max.
g_{fs}	$I_C = I_{C90}$, V_{CE} = 10 V, Pulse test, t ≤ 300 µs, duty cycle ≤ 2 %	6	7	S
$I_{C(on)}$	V_{GE} = 15V, V_{CE} = 10 V		65	A
C_{ies}	V_{CE} = 25 V, V_{GE} = 0 V, f = 1 MHz		1800	pF
C_{oes}			160	pF
C_{res}			45	pF
Q_g	$I_C = I_{c90}$, V_{GE} = 15 V, V_{CE} = 0.5 V_{CES}		75	nC
Q_{ge}			20	nC
Q_{gc}			35	nC
$t_{d(on)}$	Inductive load, T_J = 25°C		100	ns
t_{ri}	$I_C = I_{C90}$, V_{GE} = 15 V, L = 100µH		200	ns
$t_{d(off)}$	R_G = 82 Ω, VCLAMP = 0.8 V_{CES}		450	ns
t_{fi}	Note 1		600	ns
E_{off}			5.4	mJ
$t_{d(on)}$	Inductive load, T_J = 125°C		100	ns
t_{ri}	$I_C = I_{C90,}$ V_{GE} = 15 V, L = 100µH		200	ns
$E_{(on)}$	R_G = 82 Ω		1.1	mJ
$t_{d(off)}$	V_{CLAMP} = 0.8 V_{CES}		650	ns
t_{fi}	Note 1		900	ns
E_{off}			14.5	mJ
R_{thJC}				0.83 K/W
R_{thCK}			0.25	K/W

Notes: 1.) Switching times may increase for V_{CE} (Clamp) > 0.8 V_{CES}, higher T_J or R_G values.
2.) Device must be heatsunk for high temperature leakage current measurements to avoid thermal runaway.

TO-247AD (IXSH)



SYM	INCHES MIN	INCHES MAX	MILLIMETERS MIN	MILLIMETERS MAX
A	.185	.209	4.7	5.3
A_1	.087	.102	2.2	2.54
A_2	.059	.098	2.2	2.6
b	.040	.055	1.0	1.4
b_1	.065	.084	1.65	2.13
b_2	.113	.123	2.87	3.12
C	.016	.031	.4	.8
D	.819	.845	20.80	21.46
E	.610	.640	15.75	16.26
e	.215 BSC		5.45 BSC	
L	.780	.800	19.81	20.32
L1		.177		4.50
øP	.140	.144	3.55	3.65
Q	.212	.244	5.4	6.2
R	.170	.216	4.32	5.49
S	.242 BSC		6.15 BSC	

Data contained herein reflects measurements and characterization data from engineering lots.
IXYS reserves the right to change limits, test conditions, and dimensions.