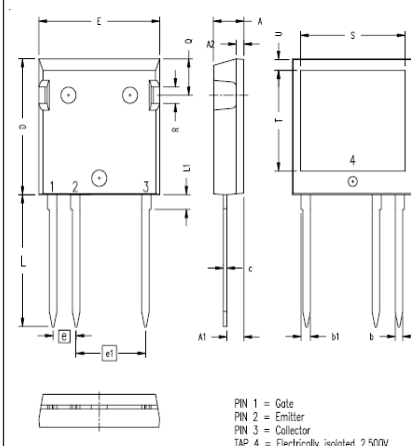


Symbol	Test Conditions ($T_J = 25^\circ\text{C}$, Unless Otherwise Specified)	Characteristic Values		
		Min.	Typ.	Max.
g_{fs}	$I_C = 32\text{A}$, $V_{CE} = 10\text{V}$, Note 1	20	30	S
C_{ies}	$V_{CE} = 25\text{V}$, $V_{GE} = 0\text{V}$, $f = 1\text{MHz}$		4290	pF
C_{oes}			167	pF
C_{res}			47	pF
Q_g	$I_C = 32\text{A}$, $V_{GE} = 15\text{V}$, $V_{CE} = 0.5 \cdot V_{CES}$		146	nC
Q_{ge}			28	nC
Q_{gc}			52	nC
$t_{d(on)}$	Inductive load, $T_J = 25^\circ\text{C}$ $I_C = 32\text{A}$, $V_{GE} = 15\text{V}$ $V_{CE} = 0.6 \cdot V_{CES}$, $R_G = 2.7\Omega$		45	ns
t_{ri}			38	ns
$t_{d(off)}$			270	ns
t_{fi}			250	ns
E_{off}			10.6	mJ
$t_{d(on)}$	Inductive load, $T_J = 125^\circ\text{C}$ $I_C = 32\text{A}$, $V_{GE} = 15\text{V}$ $V_{CE} = 0.6 \cdot V_{CES}$, $R_G = 2.7\Omega$		48	ns
t_{ri}			42	ns
E_{off}			6.0	mJ
$t_{d(off)}$			360	ns
t_{fi}			560	ns
E_{off}			13.5	mJ
R_{thJC}		0.15	0.62	$^\circ\text{C/W}$
R_{thCS}				$^\circ\text{C/W}$
R_{thJA}				$^\circ\text{C/W}$

ISOPLUS i4-Pak™ (HV) (IXGF) Outline



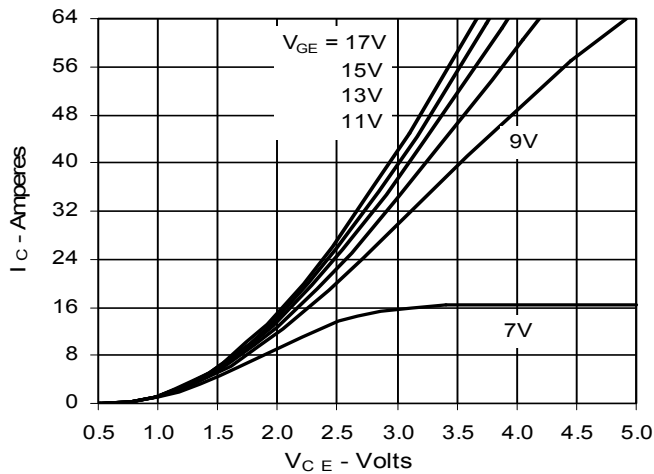
SYM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.190	.205	4.83	5.21
A1	.102	.118	2.59	3.00
A2	.046	.085	1.17	2.16
b	.045	.055	1.14	1.40
b1	.058	.068	1.47	1.73
C	.020	.029	0.51	0.74
D	.819	.840	20.80	21.34
E	.770	.799	19.56	20.29
e	.150 BSC		3.81 BSC	
e1	.450 BSC		11.43 BSC	
L	.780	.840	19.81	21.34
L1	.083	.102	2.11	2.59
Q	.210	.244	5.33	6.20
R	.100	.180	2.54	4.57
S	.660	.690	16.76	17.53
T	.590	.620	14.99	15.75
U	.065	.080	1.65	2.03

- Notes: 1. Pulse test, $t < 300\mu\text{s}$; duty cycle, $d < 2\%$.
2. Device must be heatsunk for high temperature leakage current measurements to avoid thermal runaway.

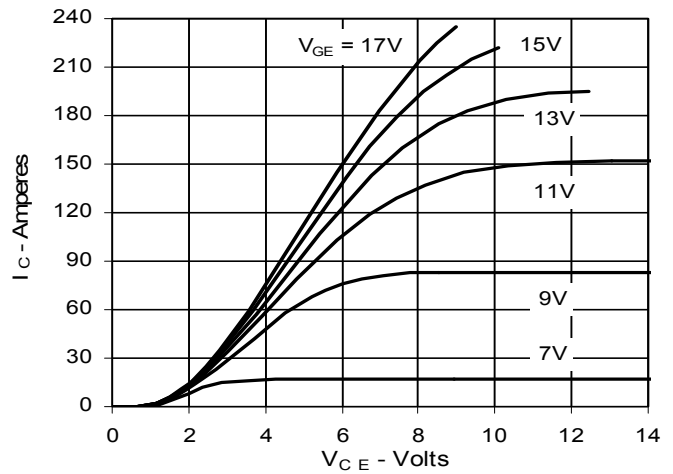
IXYS Reserves the Right to Change Limits, Test Conditions, and Dimensions.

IXYS MOSFETs and IGBTs are covered by one or more of the following U.S. patents:	4,835,592	4,931,844	5,049,961	5,237,481	6,162,665	6,404,065 B1	6,683,344	6,727,585	7,005,734 B2	7,157,338B2
	4,850,072	5,017,508	5,063,307	5,381,025	6,259,123 B1	6,534,343	6,710,405 B2	6,759,692	7,063,975 B2	
	4,881,106	5,034,796	5,187,117	5,486,715	6,306,728 B1	6,583,505	6,710,463	6,771,478 B2	7,071,537	

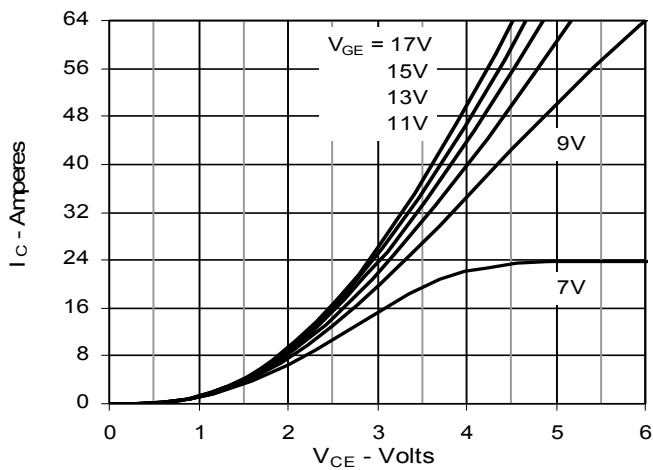
**Fig. 1. Output Characteristics
@ 25°C**



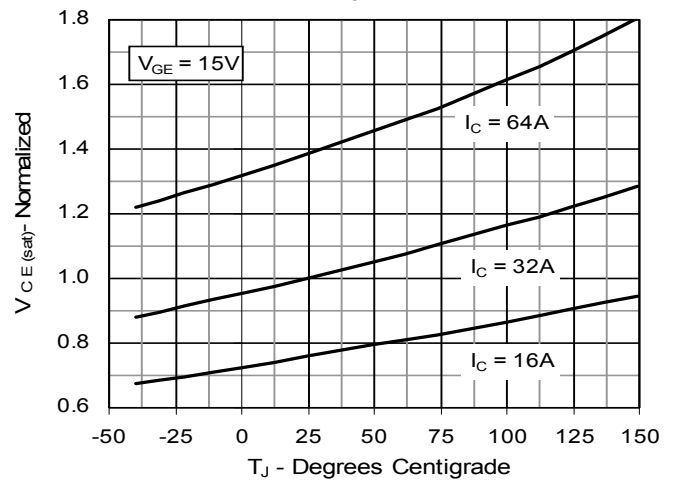
**Fig. 2. Extended Output Characteristics
@ 25°C**



**Fig. 3. Output Characteristics
@ 125°C**



**Fig. 4. Dependence of $V_{CE(sat)}$ on
Temperature**



**Fig. 5. Collector-to-Emitter Voltage
vs. Gate-to-Emitter voltage**

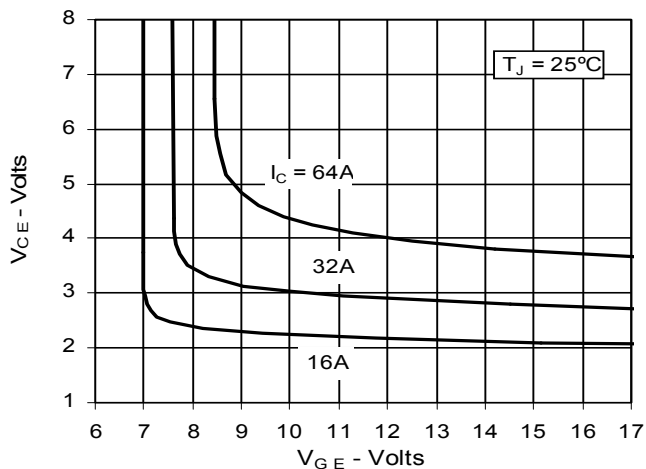


Fig. 6. Input Admittance

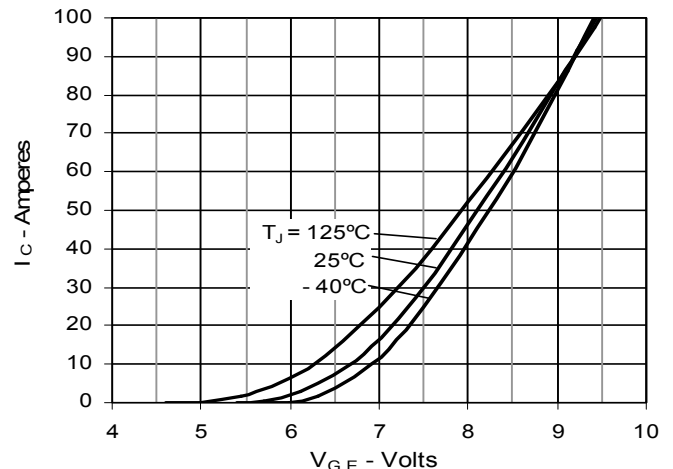


Fig. 7. Transconductance

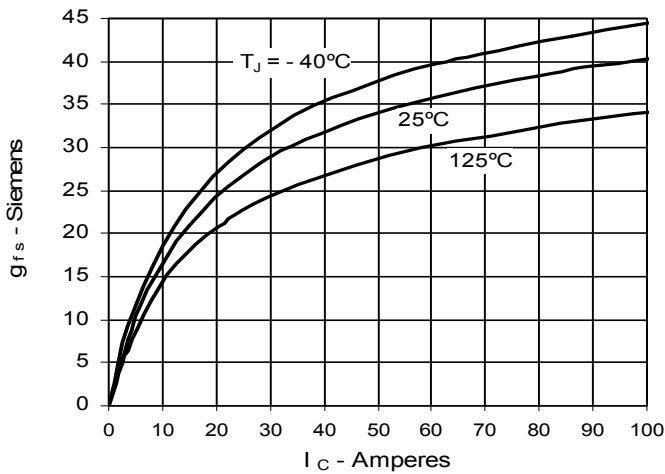


Fig. 8. Gate Charge

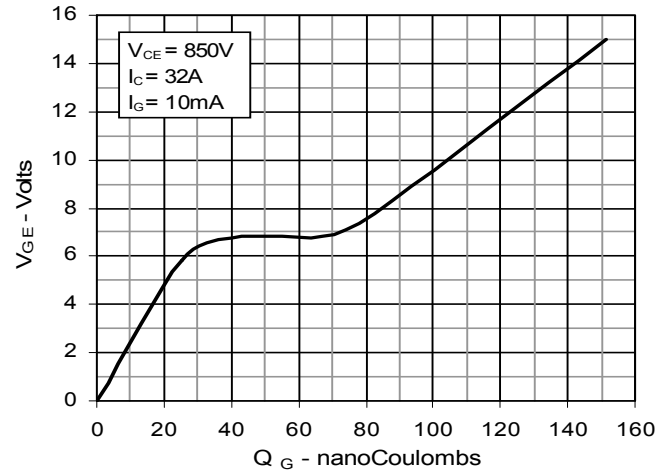


Fig. 9. Capacitance

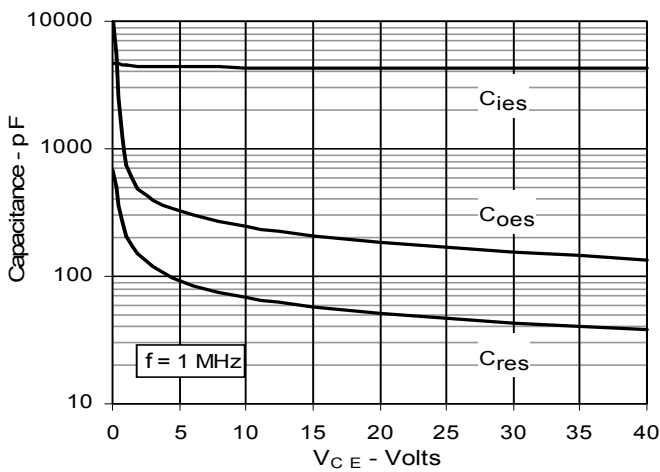


Fig. 10. Dependence of E_{off} on R_G

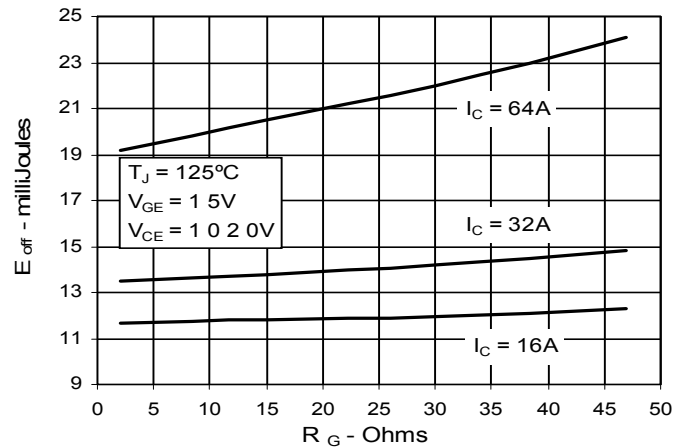


Fig. 11. Dependence of E_{off} on I_C

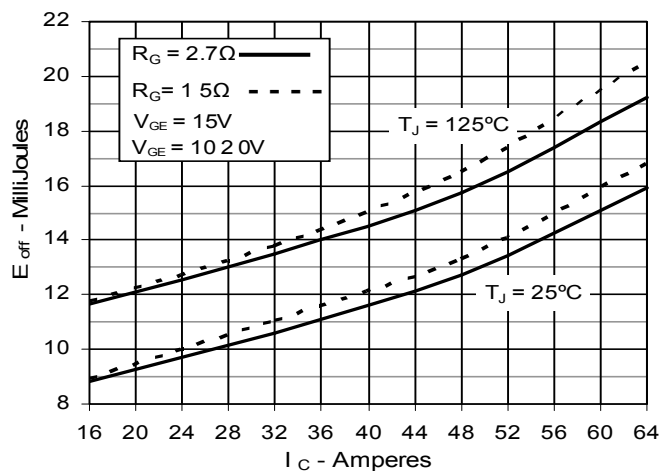


Fig. 12. Dependence of E_{off} on Temperature

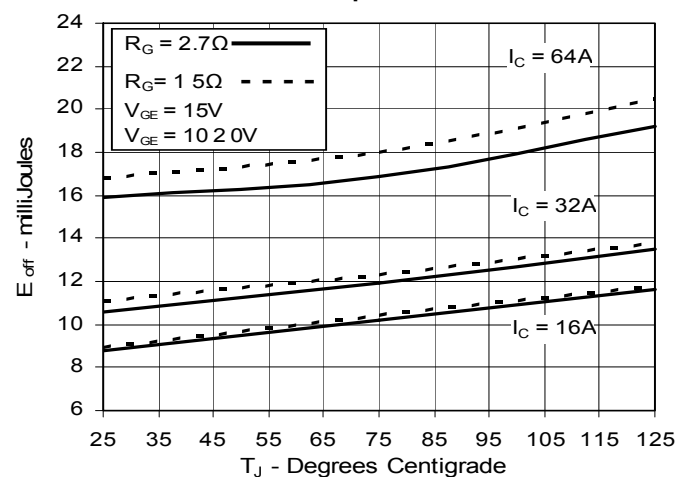
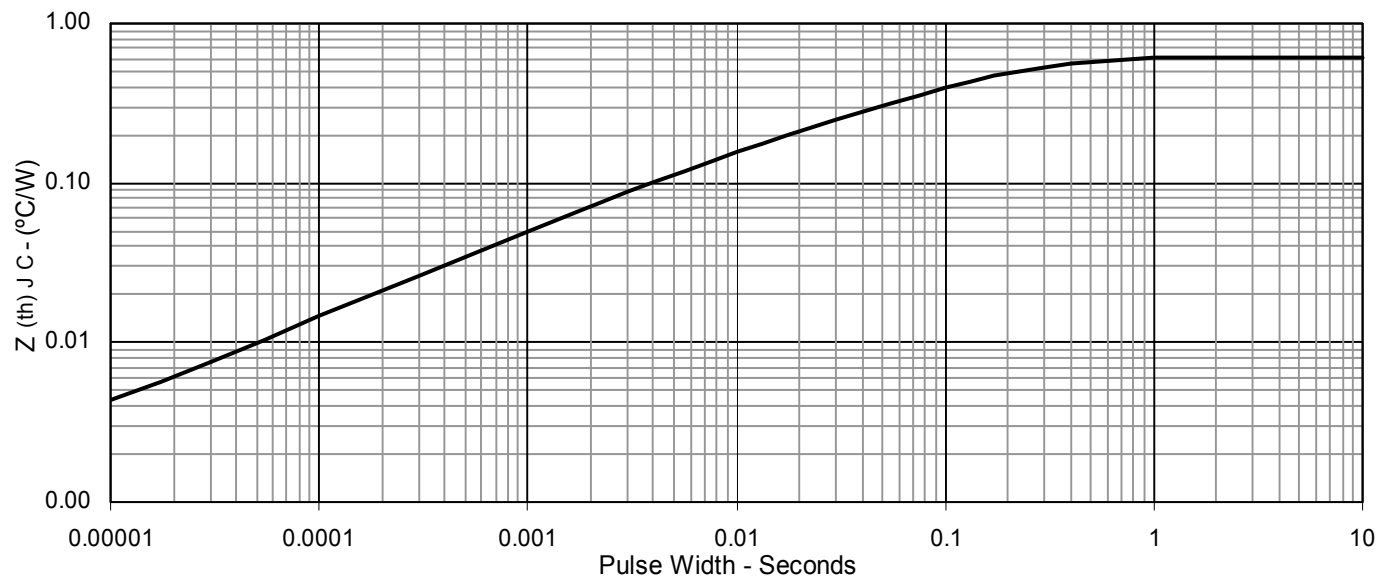


Fig. 13. Maximum Transient Thermal Impedance





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