

YJD3D6G04HHQ 6

9

3.6m

100% EAS Tested

100% VDS Tested

General Description

Split gate trench MOSFET technology

Excellent package for heat dissipation

High density cell design for low $R_{DS(ON)}$

Moisture Sensitivity Level 1

Epoxy Meets UL 94 V-0 Flammability Rating

Halogen Free

Part no. with suffix "Q" means AEC-Q101 qualified

Applications

Automotive Engine Control

Solenoid and Motor Drivers

A		I_{DM}	440	A
Avalanche energy ^B		EAS	203	mJ
Total Power Dissipation ^C	$T_A=25$	P_D	2.7	W
	$T_A=100$		1.3	
	$T_C=25$		93	
	$T_C=100$		46	

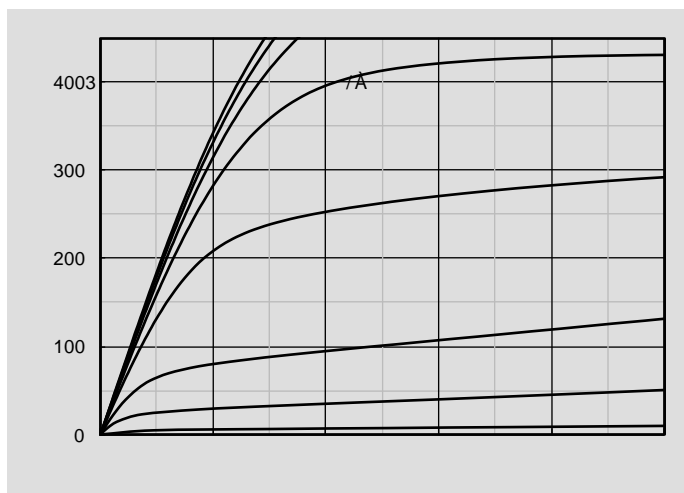
		JC	1.3	1.6	
--	--	----	-----	-----	--

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
---------------	--------------	---------	----------------------	-------------------------	----------------------------	---------------



Typical Electrical and Thermal Characteristics Diagrams





YJD3D6G04HHQ

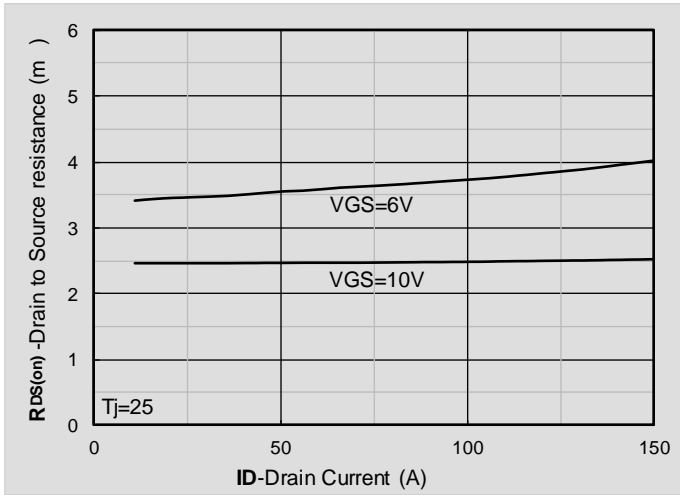


Figure 7. RDS(on) VS Drain Current

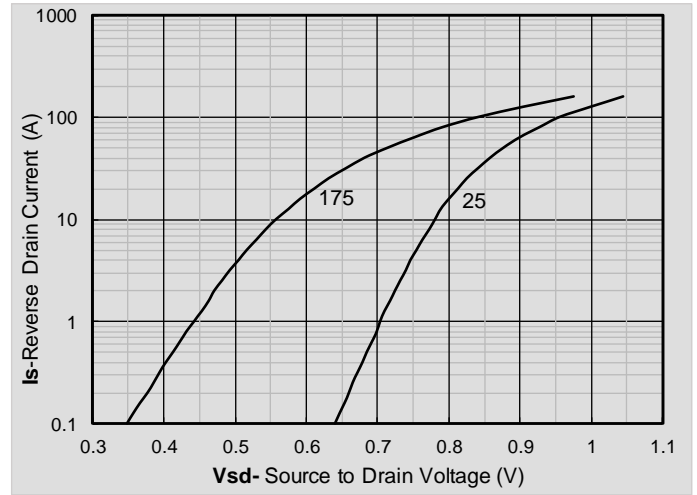
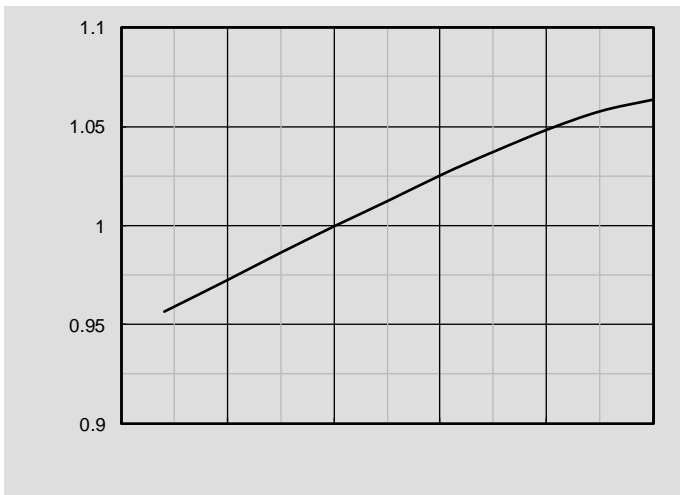
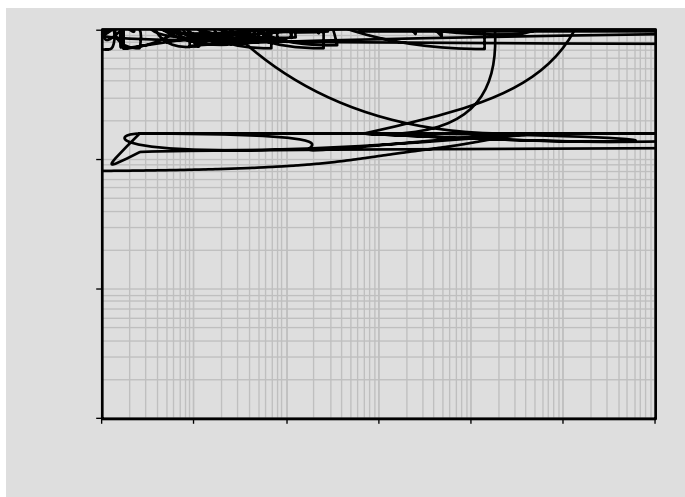


Figure 8. Forward characteristics of reverse diode

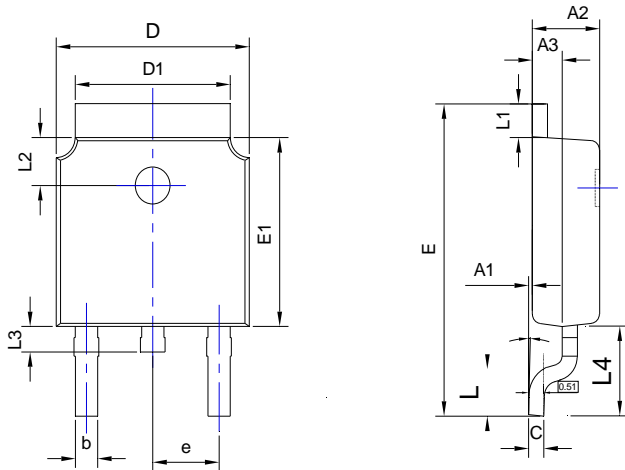






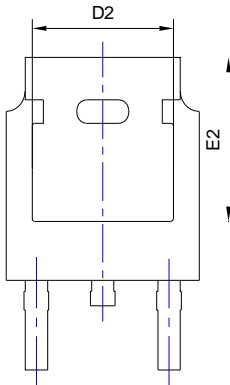
YJD3D6G04HHQ

TO-252-B Package information

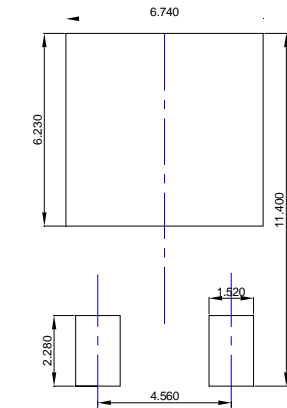


TOP VIEW

SIDE VIEW



BOTTOM VIEW



SUGGESTED SOLDER PAD LAYOUT

SYMBOL	DIMENSIONS					
	INCHES			Millimeter		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A1	0.000	---	0.008	0.000	---	0.200
A2	0.087	0.091	0.094	2.200	2.300	2.400
A3	0.035	0.039	0.043	0.900	1.000	1.100
b	0.026	0.030	0.034	0.660	0.760	0.860
c	0.018	0.020	0.023	0.460	0.520	0.580
D	0.256	0.260	0.264	6.500	6.600	6.700
D1	0.203	0.209	0.215	5.150	5.300	5.450
D2	0.181	0.189	0.195	4.600	4.800	4.950
E	0.390	0.398	0.406	9.900	10.100	10.300
E1	0.236	0.240	0.244	6.000	6.100	6.200
E2	0.203	0.209	0.215	5.150	5.300	5.450
e	0.090BSC			2.286BSC		
L	0.049	0.059	0.069	1.250	1.500	1.750
L1	0.035	---	0.050	0.900	---	1.270
L2	0.055	---	0.075	1.400	---	1.900
L3	0.024	0.031	0.039	0.600	0.800	1.000
L4	0.114REF			2.900REF		
	0°	---	10°	0°	---	10°

NOTE:

1. PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
2. TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
3. THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.



YJD3D6G04HHQ

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, life-saving, lifesustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com>, or consult your nearest Yangjie's sales office for further assistance.