

**General Description**

The ZM200N06D combines advanced trench MOSFET technology with a low resistance package to provide extremely low  $R_{DS(ON)}$ . This device is ideal for load switch and battery protection applications.

**Features**

Advance high cell density Trench technology  
 $R_{DS(ON)}$  to minimize conductive loss

**Application**

nd Synchronous Rectifier

**Product Summary****Ordering Information:**

Part NO.	ZM200N06D
Marking	ZM200N06
Packing Information	REEL TAPE
Basic ordering unit (pcs)	2500

**Absolute Maximum Ratings  $T_C = 25$** 

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	60	V
Gate-Source Voltage	$V_{GS}$	20	V
Continuous Drain Current	$I_{D@TC=25}$	38	A
	$I_{D@TC=75}$	28.9	A
	$I_{D@TC=100}$	23.9	A
Pulsed Drain Current	$I_{DM}$	76	A
Total Power Dissipation( $TC=25$ )	$P_D@TC=25$	50	W
Total Power Dissipation( $TA=25$ )	$P_D@TA=25$	2.0	W
Operating Junction Temperature	$T_J$	-55 to 150	
Storage Temperature	$T_{STG}$	-55 to 150	
Single Pulse Avalanche Energy	$E_{AS}$	80	mJ

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	$R_{thJC}$	-	-	2.3	° C/W
Thermal resistance, junction - ambient	$R_{thJA}$	-	-	62.7	° C/W
Soldering temperature, wavesoldering for 10s	$T_{sold}$	-	-	265	° C

**Electronic Characteristics**

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	60			V







Dimensions(TO-252)

Unit mm

SYMBOL	min	max	SYMBOL	min	max
A	2.10	2.50	B	0.85	1.25
b	0.50	0.80	b1	0.50	0.90
b2	0.45	0.70	C	0.45	0.70
D	6.30	6.75	D1	5.10	5.50
E	5.30	6.30	e1	2.25	2.35
L1	9.20	10.60	e2	4.45	4.75
L2	0.90	1.75	L3	0.60	1.10
K	0.00	0.23			

