



Features

It combines advanced trench MOSFET technology with a low resistance package to provide extremely low $R_{DS(ON)}$.

Advantages

device constructure $R_{DS(ON)}$ to minimize conduction loss

Applications

Synchronous Rectification for AC-DC/DC-DC converter
 Oring switches
 Power Tools

Product Summary



$V_{DS} = 60V$

$R_{DS(ON)} = 2.8m$

$I_D = 155A$



Part NO.	ZMS028N06PC
Marking	ZMS028N06
Packing Information	Bulk Tube
Basic ordering unit (pcs)	500

$T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@TC=25}$	155	A
	$I_{D@TC=75}$	118	A
	$I_{D@TC=100}$	97	A
Pulsed Drain Current	I_{DM}	465	A
Total Power Dissipation	$P_D@TC=25$	150	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy	E_{AS}	260	mJ

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	0.75	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	70	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS} = 0V, I_D = 250\mu A$	60			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 250\mu A$	1.2	1.8	2.5	V



Fig.7

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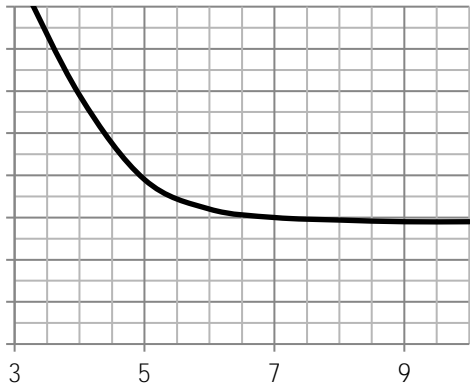


Fig.9 Switching Time Measurement Circuit

Fig.10 Gate Charge Waveform

Fig.11 Switching Time Measurement Circuit

Fig.12 Gate Charge Waveform



Dimensions (TO-220)

Unit mm

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