

General Features

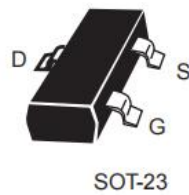
- 20V, 2.6A, $R_{DS(ON)} = 83m\Omega$ (typ) @ $V_{GS} = 4.5V$.
- $R_{DS(ON)} = 120m\Omega$ (typ) @ $V_{GS} = 2.5V$.
- Lead free product is acquired.
- Rugged and reliable.
- SOT-23 package.

Application

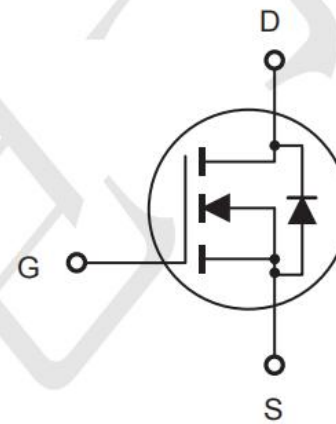
- Battery protection
- Load switch
- Power management

Ordering Information

Part Number	Qty per Reel	Reel Size
TPM2302LS3	3000	7"



MARKING =A2SHB



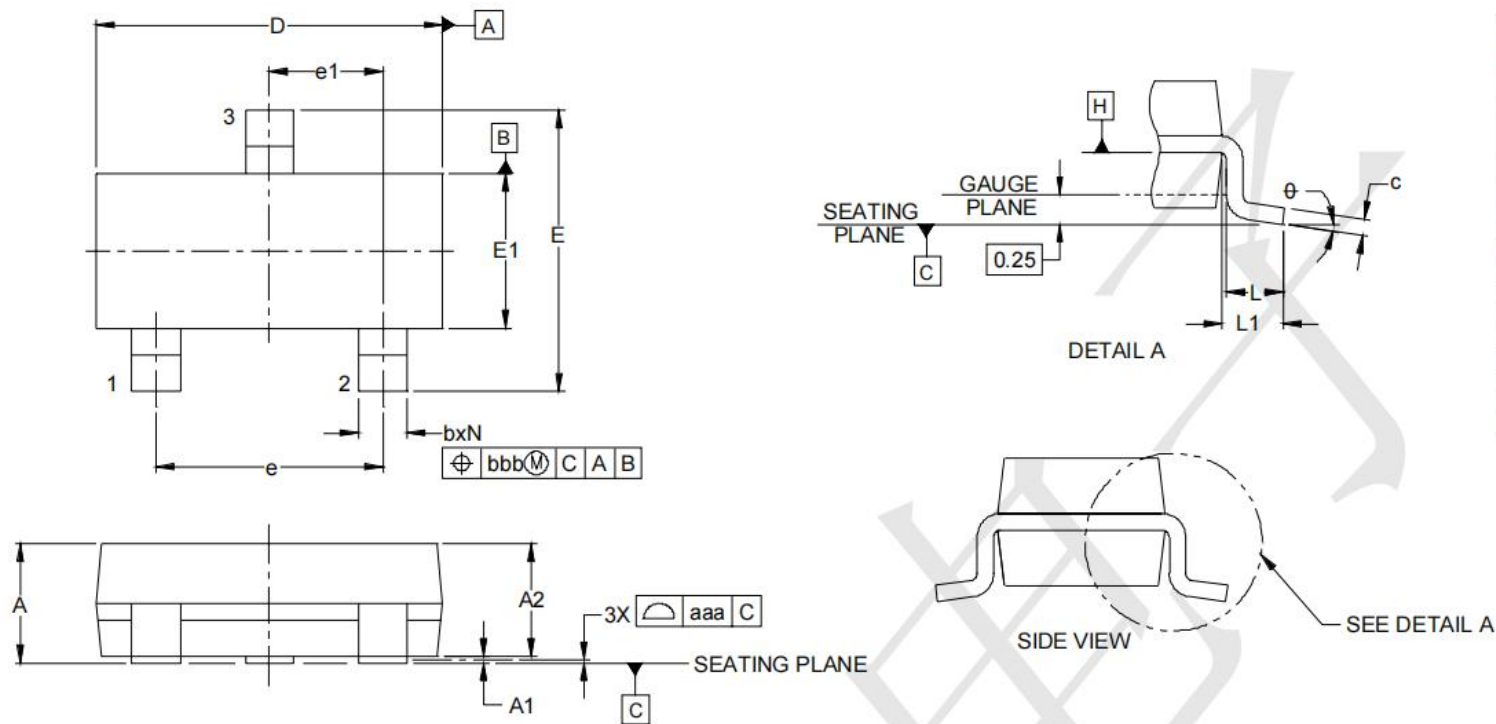
Absolute Maximum Ratings ($T_A=25^\circ C$ unless otherwise specified)

Characteristic	Symbol	Max	Unit
Drain-Source Voltage	BV_{DSS}	20	V
Gate- Source Voltage	V_{GS}	± 8	V
Drain Current (continuous)	I_D	2.6	A
Drain Current (pulsed)	I_{DM}	10	A
Total Device Dissipation $T_A=25^\circ C$	P_D	900	mW
Junction	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55to+150	$^\circ C$

Electrical Characteristics (TA=25°C unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage ($I_D = 250\mu A, V_{GS} = 0V$)	BV_{DSS}	20	—	—	V
Gate Threshold Voltage ($I_D = 250\mu A, V_{GS} = V_{DS}$)	$V_{GS(th)}$	0.4	—	1.5	V
Drain-Source On Voltage ($I_D = 50mA, V_{GS} = 5V$) ($I_D = 500mA, V_{GS} = 10V$)	$V_{DS(ON)}$	—	—	0.375 3.75	V
Diode Forward Voltage Drop ($I_S = 0.75A, V_{GS} = 0V$)	V_{SD}	—	—	1.2	V
Zero Gate Voltage Drain Current ($V_{GS} = 0V, V_{DS} = 16V$) ($V_{GS} = 0V, V_{DS} = 16V, T_A = 55^\circ C$)	I_{DSS}	—	—	1 10	μA
Gate Body Leakage ($V_{GS} = \pm 8V, V_{DS} = 0V$)	I_{GSS}	—	—	± 100	nA
Static Drain-Source On-State Resistance ($I_D = 2.6A, V_{GS} = 4.5V$) ($I_D = 2A, V_{GS} = 2.5V$)	$R_{DS(ON)}$	—	—	85 120	m Ω
Input Capacitance ($V_{GS} = 0V, V_{DS} = 6V, f = 1MHz$)	C_{ISS}	—	—	880	pF
Common Source Output Capacitance ($V_{GS} = 0V, V_{DS} = 6V, f = 1MHz$)	C_{OSS}	—	—	270	pF
Turn-ON Time ($V_{DS} = 6V, I_D = 1A, R_{GEN} = 6\Omega$)	$t_{(on)}$	—	—	20	ns
Turn-OFF Time ($V_{DS} = 6V, I_D = 1A, R_{GEN} = 6\Omega$)	$t_{(off)}$	—	—	65	ns

Outline Drawing - SOT23



DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.035	-	.044	0.89	-	1.12
A1	.000	-	.004	0.01	-	0.10
A2	.035	.037	.040	0.88	0.95	1.02
b	.012	-	.020	0.30	-	0.51
c	.003	-	.007	0.08	-	0.18
D	.110	.114	.120	2.80	2.90	3.04
E	.082	.093	.104	2.10	2.37	2.64
E1	.047	.051	.055	1.20	1.30	1.40
e	.075	-	-	1.90 BSC		
e1	.037	-	-	0.95 BSC		
L	.015	.020	.024	0.40	0.50	0.60
L1	.022	-	-	(0.55)		
N	3	-	-	3		
θ	0°	-	8°	0°	-	8°
aaa	.004	-	-	0.10		
bbb	.008	-	-	0.20		

Land Pattern - SOT23

