

Descriptions

This -50V P-Channel MOSFET in a SOT-23 Plastic Package.

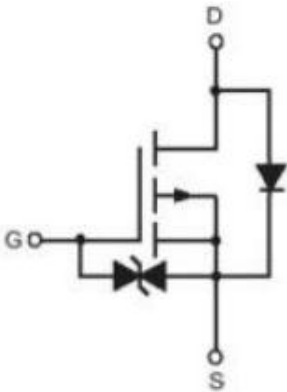
Features

- Low threshold voltage
- Direct interface to C-MOS
- TTL etc
- High-speed switching
- ESD Improved Capability 1000V
- Halogen Free Product

Applications

Line current interrupter in telephone sets, Relay, High speed and line transformer drivers.

Equivalent Circuit



Pinning



PIN1: Gate PIN 2: Source PIN 3: Drain

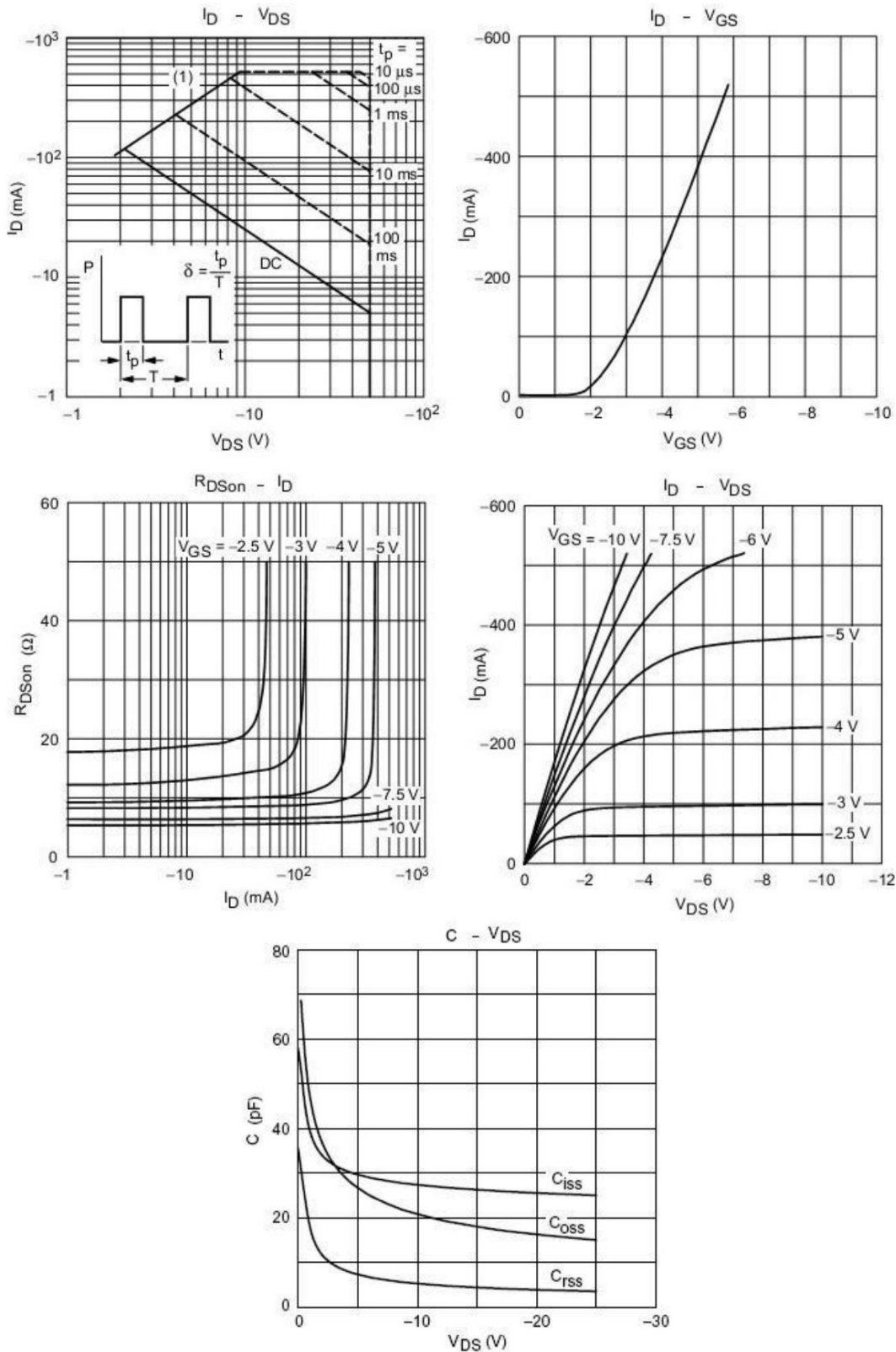
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V _{DSS}	-50	V
Drain Current – Continuous	I _D	-130	mA
Peak Drain Current	I _{DM}	-520	mA
Gate-Source Voltage	V _{GSS}	±20	V
Thermal Resistance, Junction-to-Ambient	R _{θJA}	500	°C/W
Storage Temperature Range	T _{stg}	-65 to 150	°C
Junction Temperature Range	T _j	150	°C

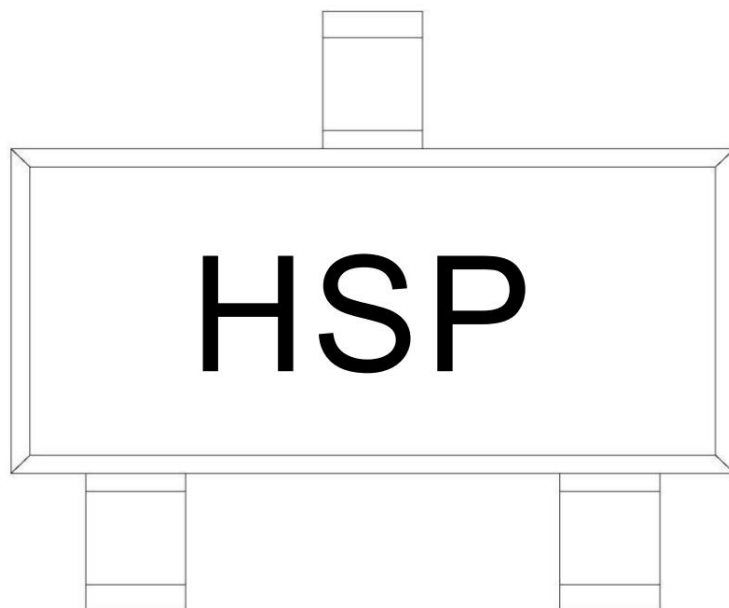
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	V _{DSS}	V _{GS} =0V I _D =-10μA	-50			V
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =-250μA	-0.8		-2.0	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{GS} =0V V _{DS} =-40V			-100	nA
		V _{GS} =0V V _{DS} =-50V			-10	μA
		V _{GS} =0V V _{DS} =-50V T _j =125 °C			-60	μA
Gate–Body Leakage.	I _{GSS}	V _{DS} =0V V _{GS} =±20V			±10	μA
Static Drain–Source On–Resistance	R _{DS(on)}	V _{GS} =-10V I _D =-130mA		1.8	5	Ω
Forward Transconductance	G _{FS}	V _{DS} =-25V I _D =-130mA	50			mS
Input Capacitance	C _{iss}	V _{DS} =-25V V _{GS} =0V f=1.0MHz		25	45	pF
Output Capacitance	C _{oss}			15	25	
Reverse Transfer Capacitance	C _{rss}			3.5	12	
Turn–On Time	t _{on}	V _{GS} =0V~-10V V _{DD} =-40V I _D =-200mA		3		ns
Turn–Off Time	t _{off}	V _{GS} =-10V~0V V _{DD} =-40V I _D =-200mA		7		

Electrical Characteristic Curve



Marking Instructions



Note:

H: Halogen Free

SP: Product Type.

Packaging SPEC

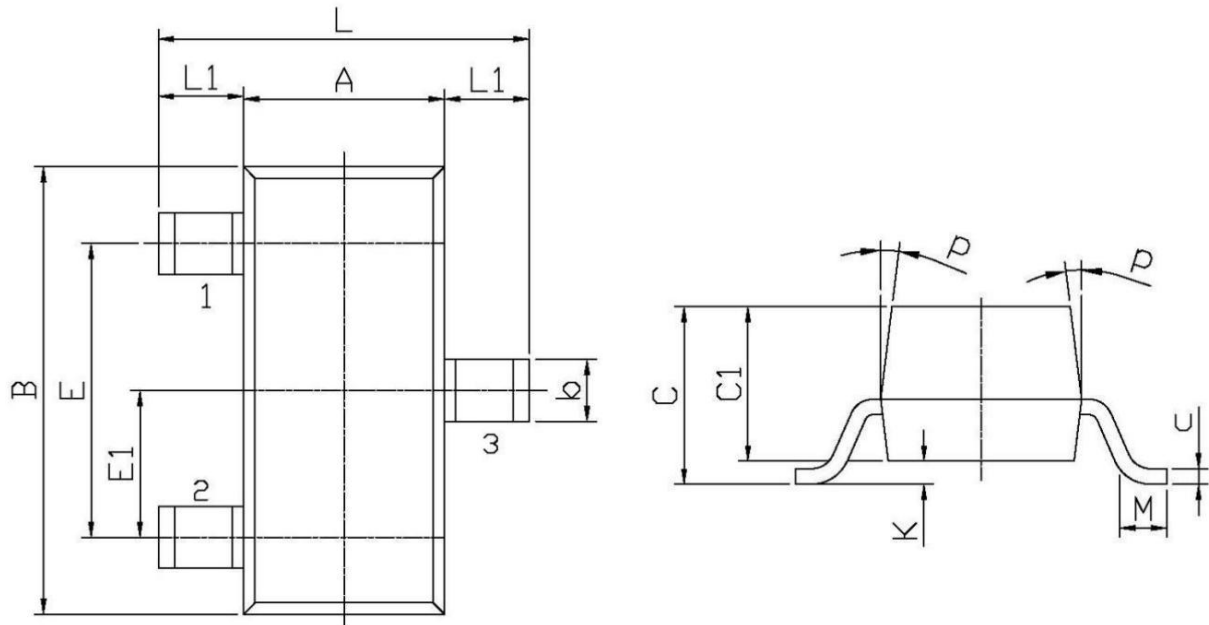
REEL INFORMATION

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

Package Outline Dimensions

SOT-23

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
B	2.70	3.10	K	0	0.10
E	1.70	2.10	M	0.20MIN	
E1	0.85	1.05	P	7°	
b	0.35	0.55			