

Features

	$V_{(BR)DSS}$	$R_{DS(on)Typ}$	I_D
Q_1	20V	270mΩ@4.5V	0.8 A
		300mΩ@2.5V	
		550mΩ@1.8V	
Q_2	-12V	470 mΩ@-4.5V	-0.9A
		610mΩ@-2.5V	
		950mΩ(TYP)@-1.8V	

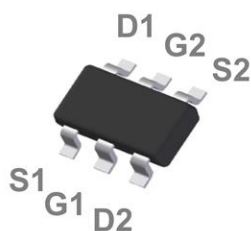
- ESD Protected

Application

- Notebook
- Load Switch
- Networking
- Hand-held Instruments

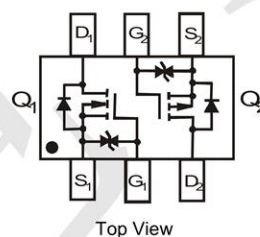
Package and Pin Configuration

SOT363



Marking: . TÇΩ
TW = Par Number
P = TECH PUBIC LOGOO

Circuit diagram



Absolute Maximum Ratings $T_c=25^{\circ}C$ unless otherwise noted

Parameter	Symbol	Value	Unit
N-MOSFET			
Drain-Source Voltage	V_{DS}	20	V
Typical Gate-Source Voltage	V_{GS}	±10	V
Continuous Drain Current (note 1)	I_D	0.8	A
Pulsed Drain Current ($t_p=10\mu s$)	I_{DM}	1.3	A
P-MOSFET			
Drain-Source Voltage	V_{DS}	-12	V
Typical Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current (note 1)	I_D	-0.9	A
Pulsed Drain Current ($t_p=10\mu s$)	I_{DM}	-1.3	A
Temperature and Thermal Resistance			
Thermal Resistance from Junction to Ambient (note 1)	$R_{\theta JA}$	650	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~+150	$^{\circ}C$
Lead Temperature for Soldering Purposes(1/8" from case for 10 s)	T_L	260	$^{\circ}C$

Electrical Characteristics (T_J=25 °C, unless otherwise noted)

**Q₁
N-ch MOSFET ELECTRICAL CHARACTERISTICS**

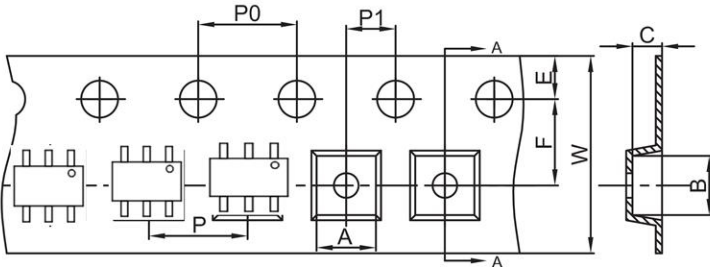
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC CHARACTERISTICS						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =250μA	20	27		V
Zero gate voltage drain current	I _{DSS}	V _{DS} =20V, V _{GS} = 0V			1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±12V, V _{DS} = 0V			±20	uA
Gate threshold voltage (note 2)	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.45	0.7	1.1	V
Drain-source on-resistance(note 2)	R _{DSON}	V _{GS} =4.5V, I _D =0.65A		270		mΩ
		V _{GS} =2.5V, I _D =0.55A		300		mΩ
		V _{GS} =1.8V, I _D =0.45A		550	800	mΩ
Forward tranconductance(note 2)	g _{FS}	V _{DS} =10V, I _D =0.8A		1.6		S
Diode forward voltage	V _{SD}	I _S =0.15A, V _{GS} = 0V			1.2	V
DYNAMIC CHARACTERISTICS (note 4)						
Input Capacitance	C _{ISS}	V _{DS} =16V, V _{GS} =0V, f =1MHz			120	pF
Output Capacitance	C _{OSS}				20	pF
Reverse Transfer Capacitance	C _{RSS}				15	pF
SWITCHING CHARACTERISTICS (note 3,4)						
Turn-on delay time	t _{d(on)}	V _{GS} =4.5V, V _{DS} =10V, I _D =500mA, R _{GEN} =10Ω		6.7		ns
Turn-on rise time	t _r			4.8		ns
Turn-off delay time	t _{d(off)}			17.3		ns
Turn-off fall time	t _f			7.4		ns

**Q₂
P-ch MOSFET ELECTRICAL CHARACTERISTICS**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC CHARACTERISTICS						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =-250μA	-12			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =-12V, V _{GS} = 0V			-1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±12V, V _{DS} = 0V			±20	uA
Gate threshold voltage (note 2)	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250μA	-0.45	-0.7	-1.3	V
Drain-source on-resistance(note 2)	R _{DSON}	V _{GS} =-4.5V, I _D =-0.5A		470		mΩ
		V _{GS} =-2.5V, I _D =-0.45A		610	800	mΩ
		V _{GS} =-1.8V, I _D =-0.36A		950		mΩ
Forward tranconductance(note 2)	g _{FS}	V _{DS} =-10V, I _D =-0.54A		1.2		S
Diode forward voltage	V _{SD}	I _S =-0.5A, V _{GS} = 0V			-1.2	V
DYNAMIC CHARACTERISTICS (note 4)						
Input Capacitance	C _{ISS}	V _{DS} =-10V, V _{GS} =0V, f =1MHz		60		pF
Output Capacitance	C _{OSS}			5.8		pF
Reverse Transfer Capacitance	C _{RSS}			5		pF
SWITCHING CHARACTERISTICS (note 3,4)						
Turn-on delay time	t _{d(on)}	V _{GS} =-4.5V, V _{DS} =-10V, I _D =-200mA, R _{GEN} =10Ω		9		ns
Turn-on rise time	t _r			5.8		ns
Turn-off delay time	t _{d(off)}			32.7		ns
Turn-off fall time	t _f			20.3		ns



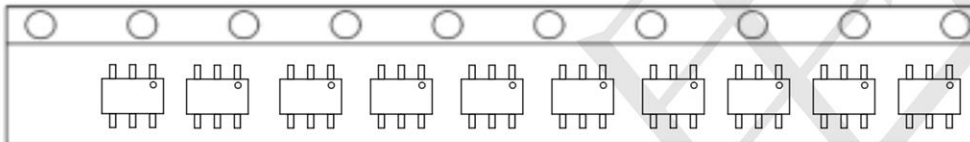
SOT-363 Embossed Carrier Tape



Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-363 Tape Leader and Trailer

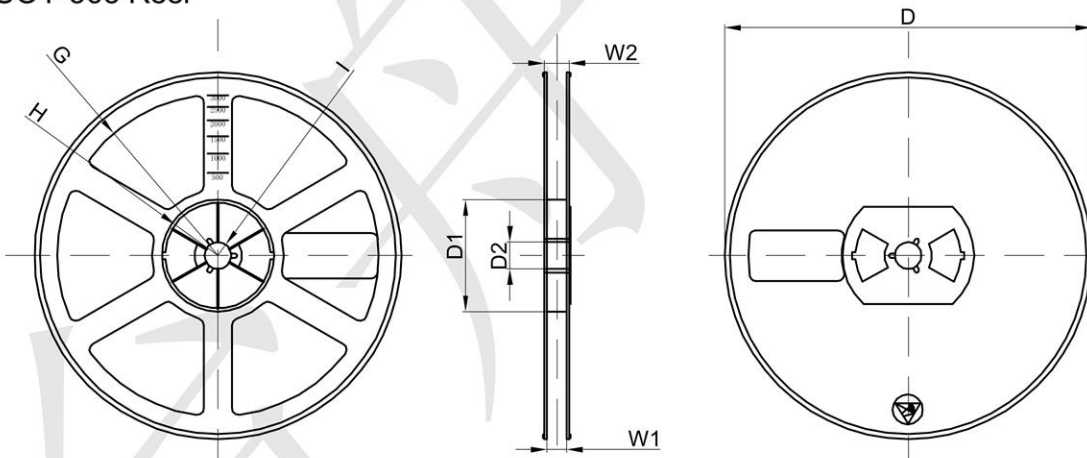
Package orientation in reel
pin1



sprocket Holes

Shipping: 3000 pcs / Tape & Reel

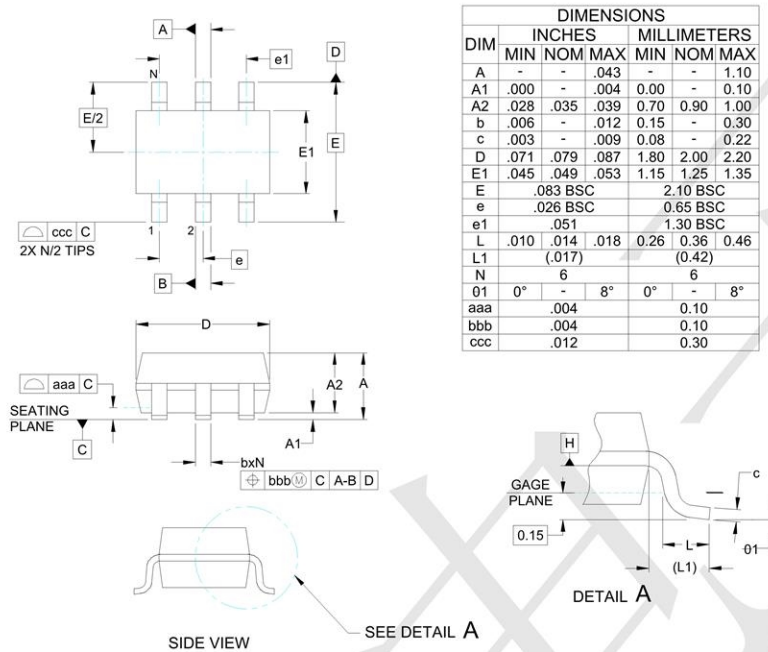
SOT-363 Reel



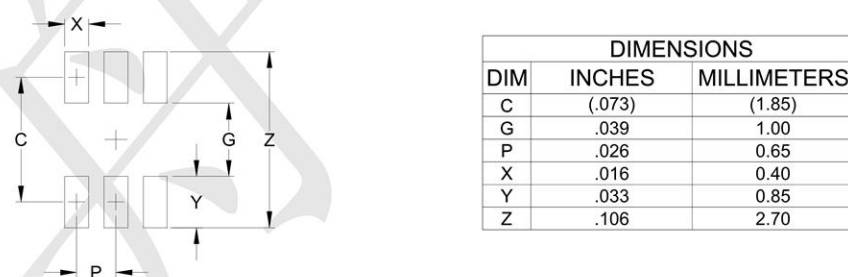
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

Outline Drawing - SOT-363(2.0X2.1)



Land Pattern - SOT-363



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [TECH PUBLIC](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [NTNS3A92PZT5G](#) [IRFD120](#) [IRFF430](#) [JANTX2N5237](#) [2N7000](#) [2SK2464-TL-E](#) [FCA20N60_F109](#) [FDZ595PZ](#) [AOD464](#)
[2SK2267\(Q\)](#) [2SK2545\(Q,T\)](#) [405094E](#) [423220D](#) [MIC4420CM-TR](#) [VN1206L](#) [614234A](#) [715780A](#) [SSM6J414TU,LF\(T](#) [751625C](#)
[IPP60R600P6XKSA1](#) [RJK60S5DPK-M0#T0](#) [BSC884N03MS G](#) [BSF024N03LT3 G](#) [PSMN4R2-30MLD](#) [TK31J60W5,S1VQ\(O](#)
[2SK2614\(TE16L1,Q\)](#) [DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [FCAB21350L1](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#) [NTE2384](#) [NTE2969](#)
[NTE6400A](#) [DMN2080UCB4-7](#) [DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [SSM6P54TU,LF](#) [DMP22D4UFO-7B](#)
[IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#) [STF5N65M6](#) [STU5N65M6](#) [C3M0021120D](#) [DMN13M9UCA6-7](#)
[BSS340NWH6327XTSA1](#)