



Product Summary

$V_{(BR)DSS}$	$R_{DS(on)TYP}$	I_D
-30V	480mΩ@-10V	-0.4A
	690mΩ@-4.5V	
30V	290mΩ@10V	0.75A
	320mΩ@4.5V	

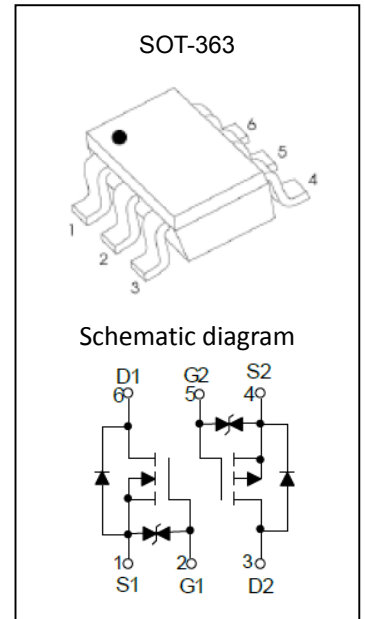
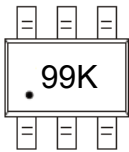
Feature

- Surface Mount Package
- Low $R_{DS(on)}$
- Low leakage current
- ESD Protected

Application

- Low voltage applications
- Load/Power Switching
- Battery Management for Ultra Small Portable Electronics

MARKING:



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
P-MOSFET			
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current ⁽¹⁾	I_D	-0.4	A
Pulsed Drain Current	I_{DM}	-1.2	A
Power Dissipation	P_D	1.4	W
N-MOSFET			
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current	I_D	0.75	A
Pulsed Drain Current ⁽¹⁾	I_{DM}	2.2	A
Power Dissipation	P_D	1.4	W
Temperature and Thermal Resistance			
Thermal Resistance from Junction to Ambient ⁽²⁾	$R_{\theta JA}$	89	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

P-channel MOSFET ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D = -250μA	-30			V
Zero gate voltage drain current	I _{DSS}	V _{DS} = -30V, V _{GS} = 0V			-1	μA
Gate-body leakage current	I _{GSS}	V _{GS} = ±10V, V _{DS} = 0V			±10	μA
Gate threshold voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250μA	-0.55	-1.45	-1.95	V
Drain-source on-resistance ⁽³⁾	R _{DS(on)}	V _{GS} = -10V, I _D = -0.30A		480	620	mΩ
		V _{GS} = -4.5V, I _D = -0.30A		690	900	
Forward tranconductance	g _{FS}	V _{DS} = -10V, I _D = -0.30A		1.2		S
Dynamic characteristics⁽⁴⁾						
Input Capacitance	C _{iSS}	V _{DS} = -10V, V _{GS} = 0V, F = 1.0MHz		120		pF
Output Capacitance	C _{oSS}			18		
Reverse Transfer Capacitance	C _{rSS}			9		
Switching Characteristics⁽⁴⁾						
Turn-on delay time	t _{d(on)}	V _{DS} = -10V, I _D = -200mA, V _{GS} = -4.5V, R _G = 10Ω		9		nS
Turn-on rise time	t _r			6		
Turn-off delay time	t _{d(off)}			34		
Turn-off fall time	t _f			20		
Source-Drain Diode characteristics						
Diode forward voltage	V _{DS}	I _S = -0.4A, V _{GS} = 0V			-1.2	V

N-channel MOSFET ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =250μA	30			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =30V, V _{GS} = 0V			1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±10V, V _{DS} = 0V			±3	μA
Gate threshold voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.5	1.0	1.5	V
Drain-source on-resistance ⁽³⁾	R _{DS(on)}	V _{GS} =10V, I _D =0.6A		290	370	mΩ
		V _{GS} =4.5V, I _D =0.6A		320	420	
Forward tranconductance	g _{FS}	V _{DS} =5V, I _D =0.5A		0.9		S
Dynamic characteristics⁽⁴⁾						
Input Capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0V, F=1.0MHz		44		pF
Output Capacitance	C _{oss}			15		
Reverse Transfer Capacitance	C _{rss}			8		
Switching Characteristics⁽⁴⁾						
Turn-on delay time	t _{d(on)}	V _{DD} =10V, I _D =0.7A V _{GS} =4.5V, R _{GEN} =51Ω		5		ns
Turn-on rise time	t _r			8		
Turn-off delay time	t _{d(off)}			23		
Turn-off fall time	t _f			41		
Source-Drain Diode characteristics						
Diode forward voltage	V _{DS}	I _S =0.6A, V _{GS} = 0V		0.87	1.2	V

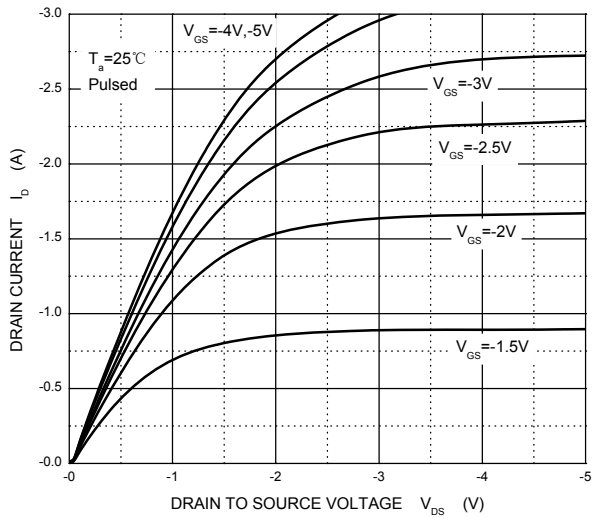
Notes:

1. Repetitive Rating : Pulse width limited by maximum junction temperature.
2. Surface Mounted on FR4 Board, t < 5 sec.
3. Pulse Test : Pulse Width≤300μs, Duty Cycle ≤ 2%.
4. Guaranteed by design, not subject to production testing.

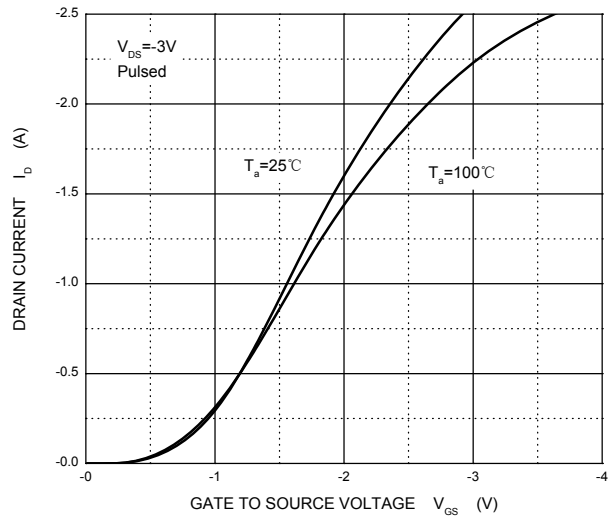
Typical Electrical and Thermal Characteristics

P-Channel MOS

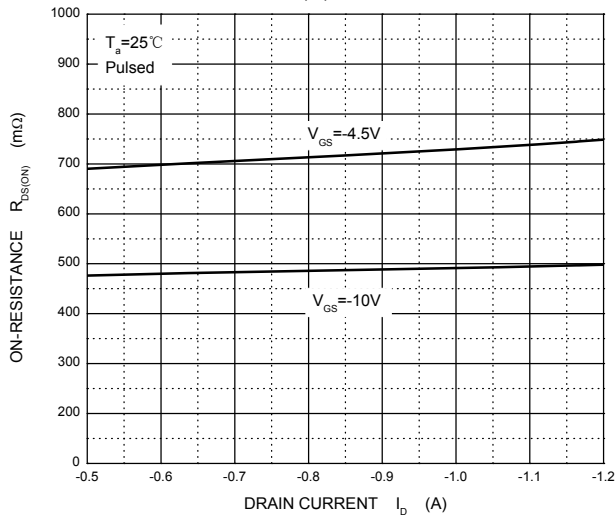
Output Characteristics



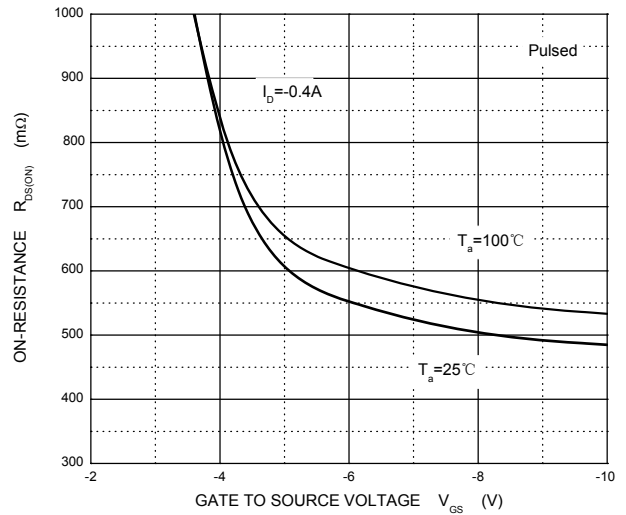
Transfer Characteristics



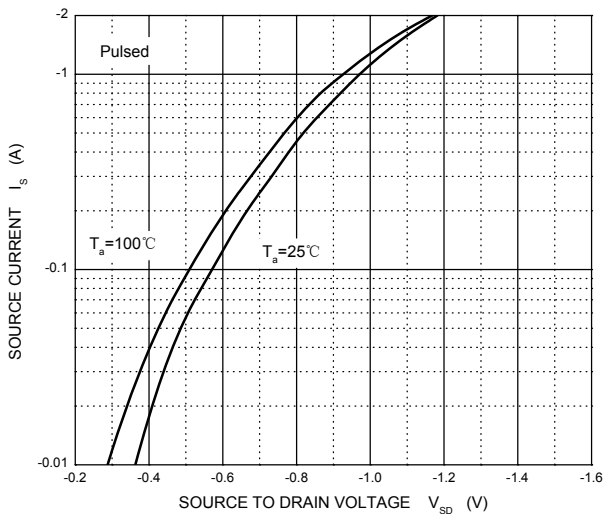
$R_{DS(ON)}$ — I_D



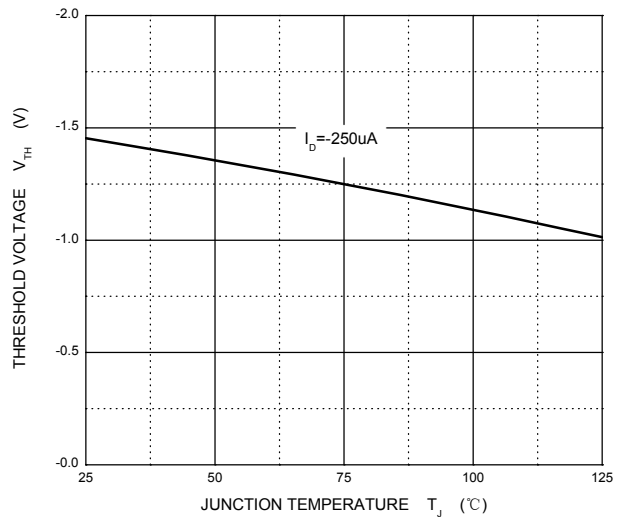
$R_{DS(ON)}$ — V_{GS}



I_S — V_{SD}

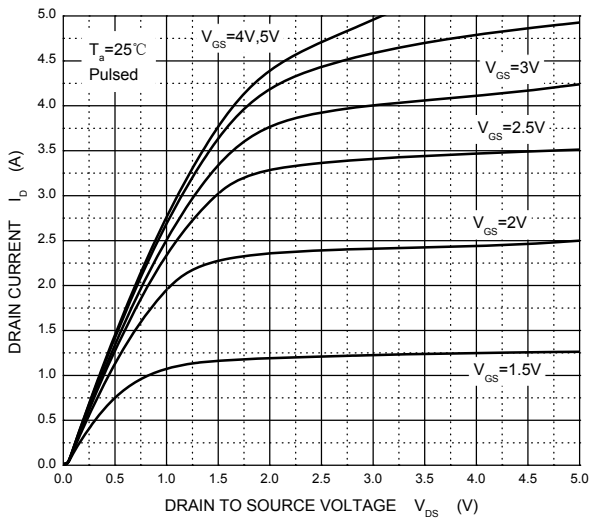


Threshold Voltage

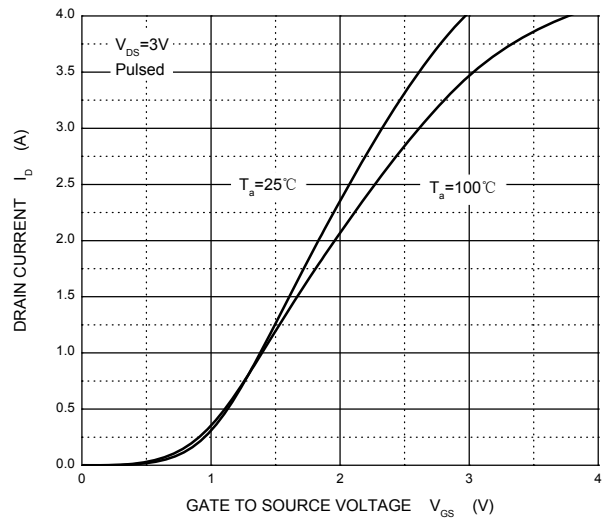


N-Channel MOS

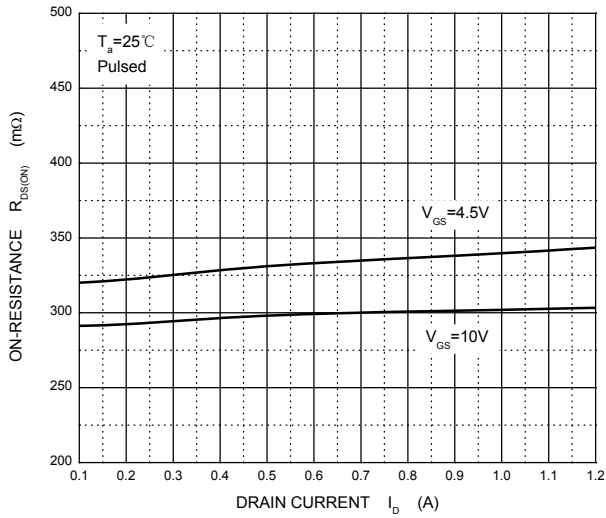
Output Characteristics



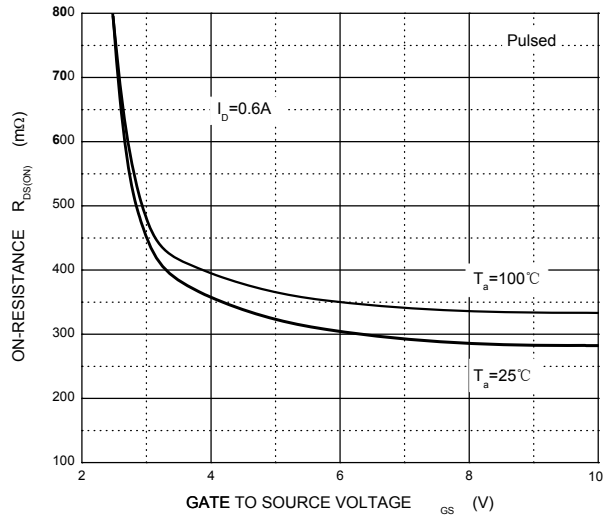
Transfer Characteristics



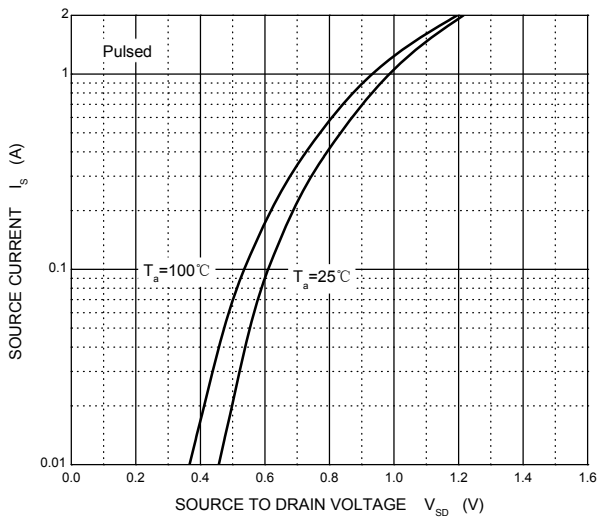
$R_{DS(ON)}$ — I_D



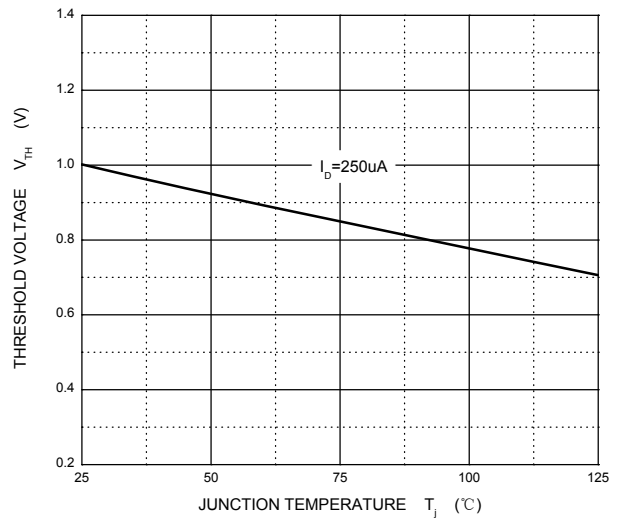
$R_{DS(ON)}$ — V_{GS}



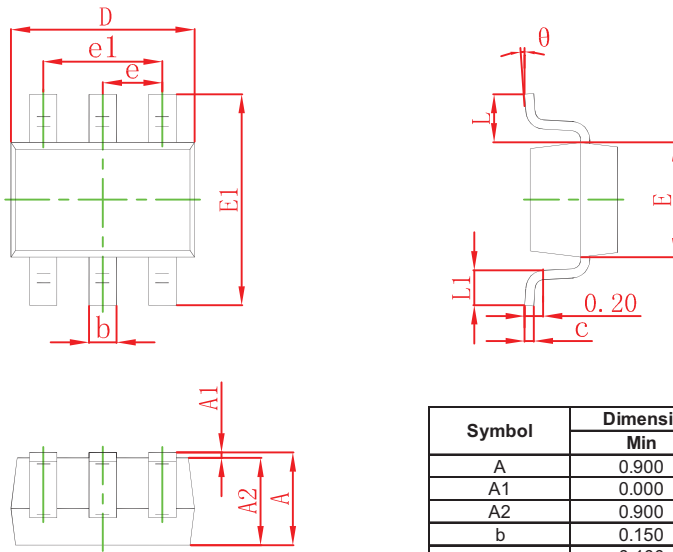
I_S — V_{SD}



Threshold Voltage



SOT-363 Package Information

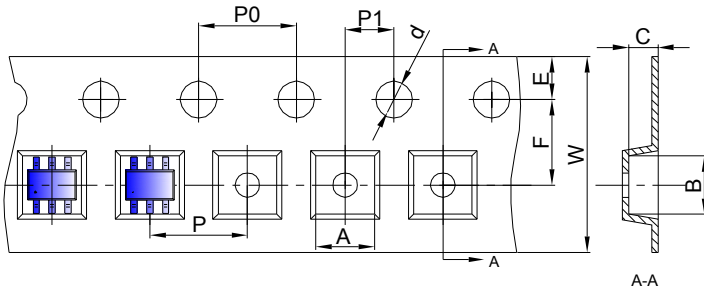


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-363 Tape and Reel

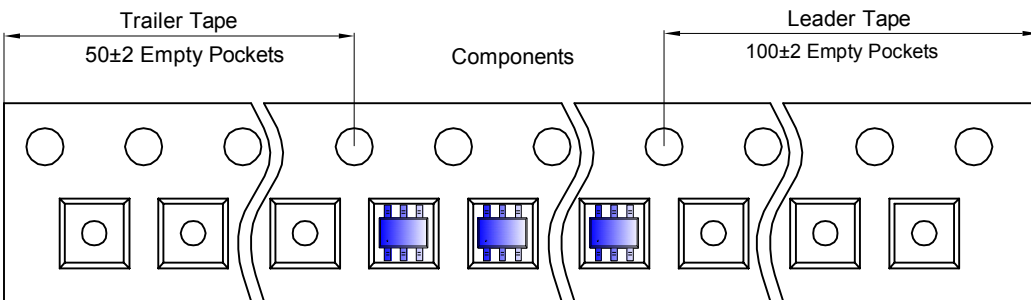
SOT-363 Tape and reel

SOT-363 Embossed Carrier Tape

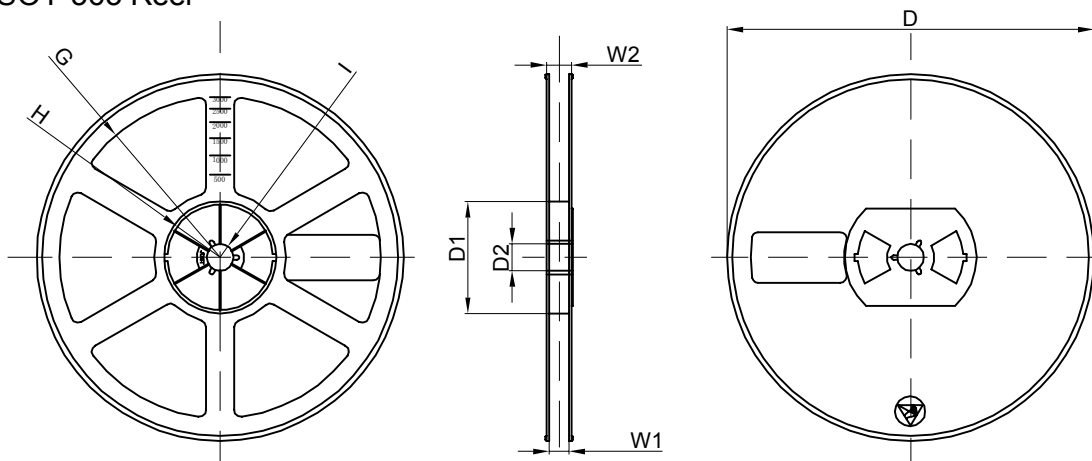


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-363 Tape Leader and Trailer



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	30,000 pcs	203×203×195	120,000 pcs	438×438×220	

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)