TO-252 P

P-CHANNEL MOSFET in a TO-252 Plastic Package.

V_{DS} (V) = -60V I_D =-14 A (V_{GS} = ± 20V)

$R_{DS(on)1}$@-10V ≤ 100mΩ(Type.83mΩ)

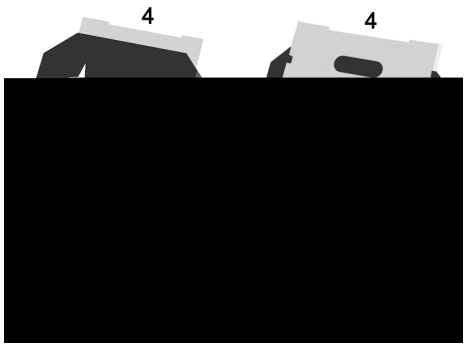
$R_{DS(on)2}$@-4.5V ≤ 130mΩ(Type.100mΩ)

HF Product.

LED

Motor Drive,Power Tools,LED Lighting.



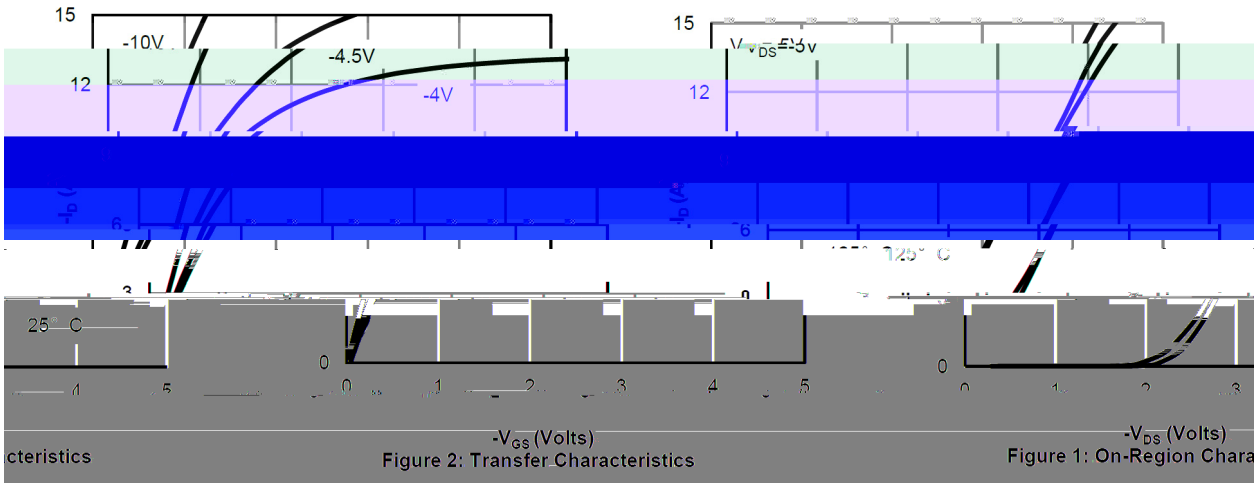


PIN1 G PIN 2 D PIN 3 S PIN 4 D

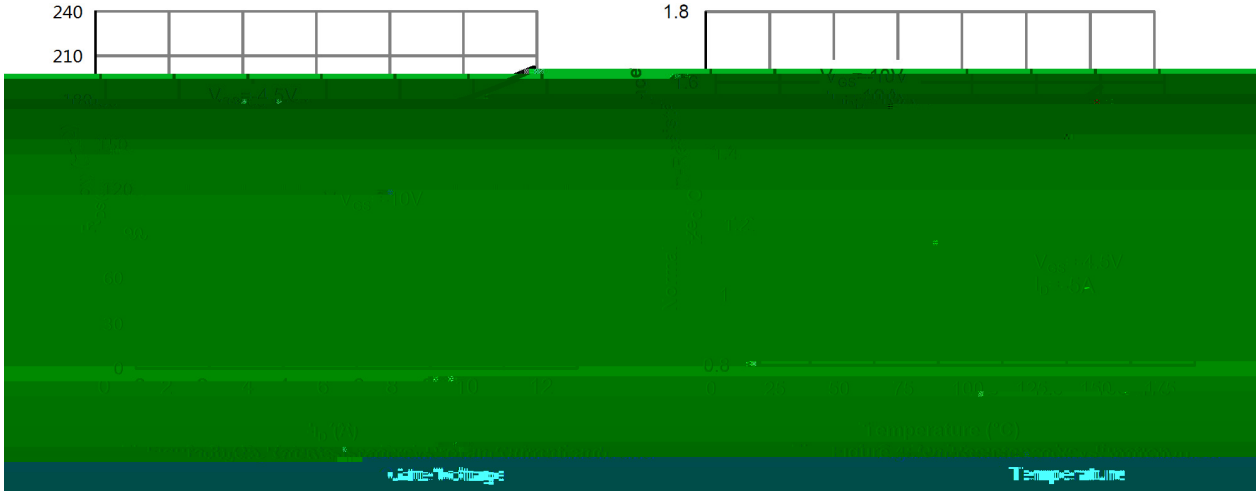
See Marking Instructions.

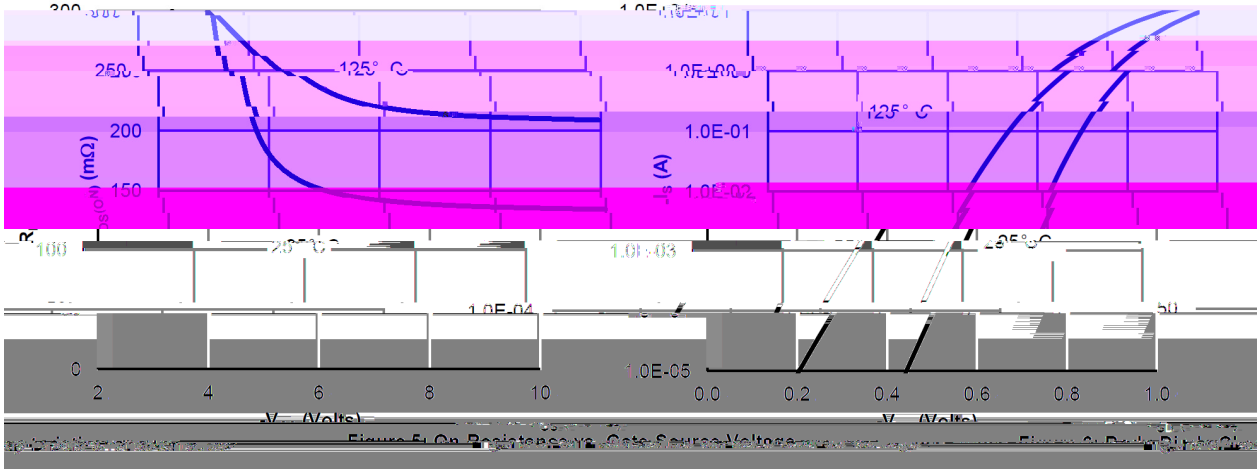
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	-60	V
Drain Current		I_D(Tc=25)	-14	A
Drain Current - Pulsed		I_{DM}	-42.5	A
Gate-Source Voltage		V_{GS}	±20	V
Power Dissipation		P_D(Tc=25)	32	W
Storage Temperature Range		T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	t ≤ 10s	$R_{\theta JA}$	28	/W
	Steady-State		55	
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	3.91	

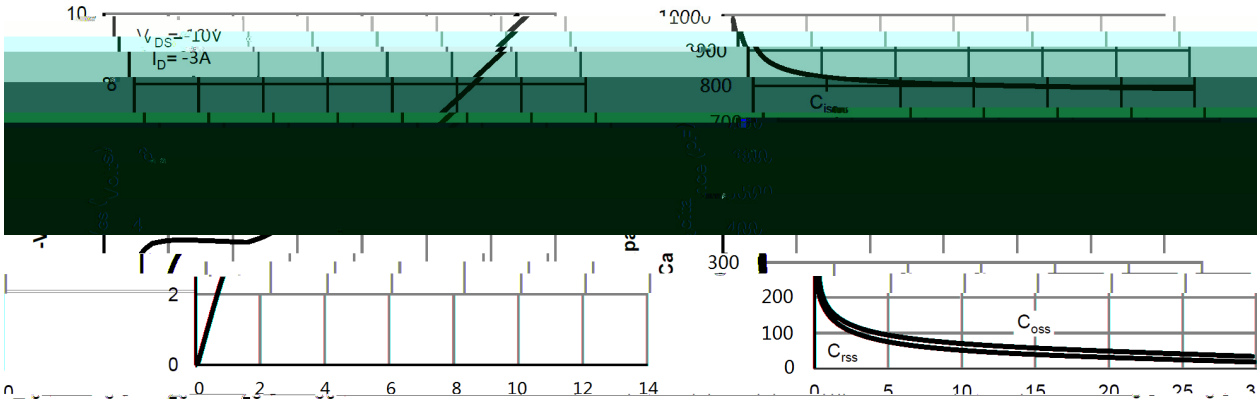
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS}=0V I_D=-250μA	-60	-65		V
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=-250μA	-1	-1.6	-2.5	V
Static Drain–Source On–Resistance	$R_{DS(on)}$	V_{GS}=-10V I_D=-10A		83	100	mΩ
		V_{GS}=-4.5V I_D=-5A		100	130	mΩ
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-60V V_{GS}=0V			-1.0	μA
Gate-Body leakage current	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±100	nA
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=-1A T_J=25			-1.2	V
Gate resistance	R_g	f=1MHz		6.5		Ω
Input Capacitance	C_{iss}	V_{DS}=-25V V_{GS}=0V f=1.0MHz		890		pF
Output Capacitance	C_{oss}			90		
Reverse Transfer Capacitance	C_{rss}			64		
Total Gate Charge	$Q_{g(-10V)}$	V_{DS}=-10V V_{GS}=-10.0V I_D=-3A		12.3		nC
Total Gate Charge	$Q_{g(-4.5V)}$			6.3		
Gate-to-Source Charge	Q_{gs}			1.6		
Gate-to-Drain Charge	Q_{gd}			2.4		
Turn–On Delay Time	$t_{d(on)}$	V_{DS}=-10V V_{GS}=-10V R_L=5.4Ω R_{GEN}=3Ω		12		ns
Turn–On Rise Time	t_r			20		
Turn–Off Delay Time	$t_{d(off)}$			20		
Turn–Off Fall Time	t_f			25		



cteristics Figure 2: Transfer Characteristics Figure 1: On-Region Chara



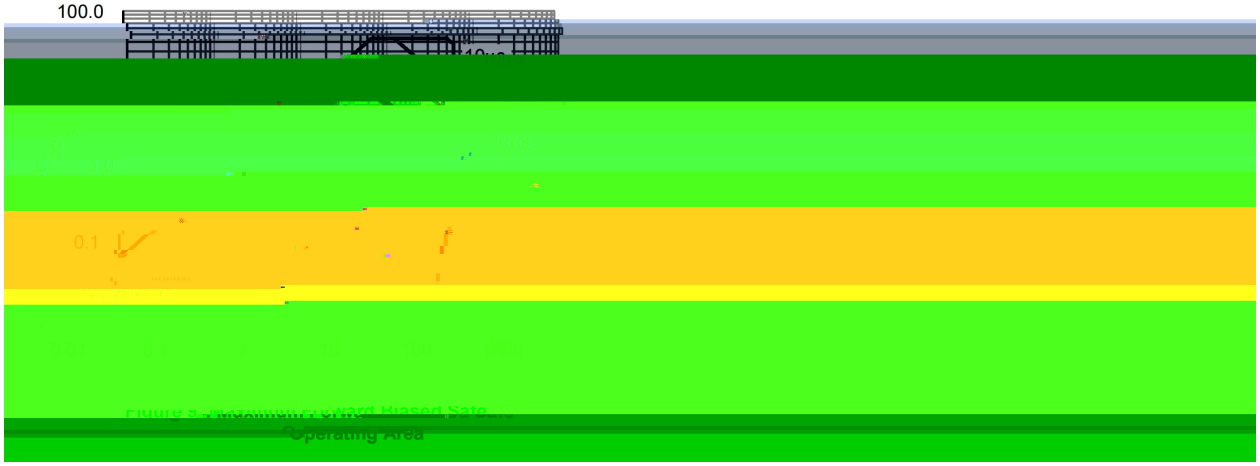




$-V_{DS}$ (Volts)
Capacitance Characteristics

Q_g (nC)
Figure 7: Gate-Charge Characteristics

Figure 8:



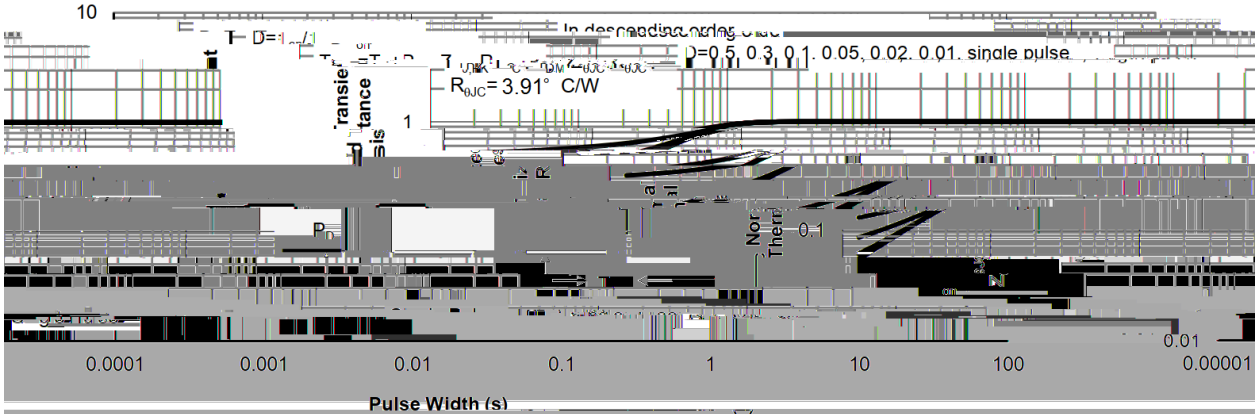
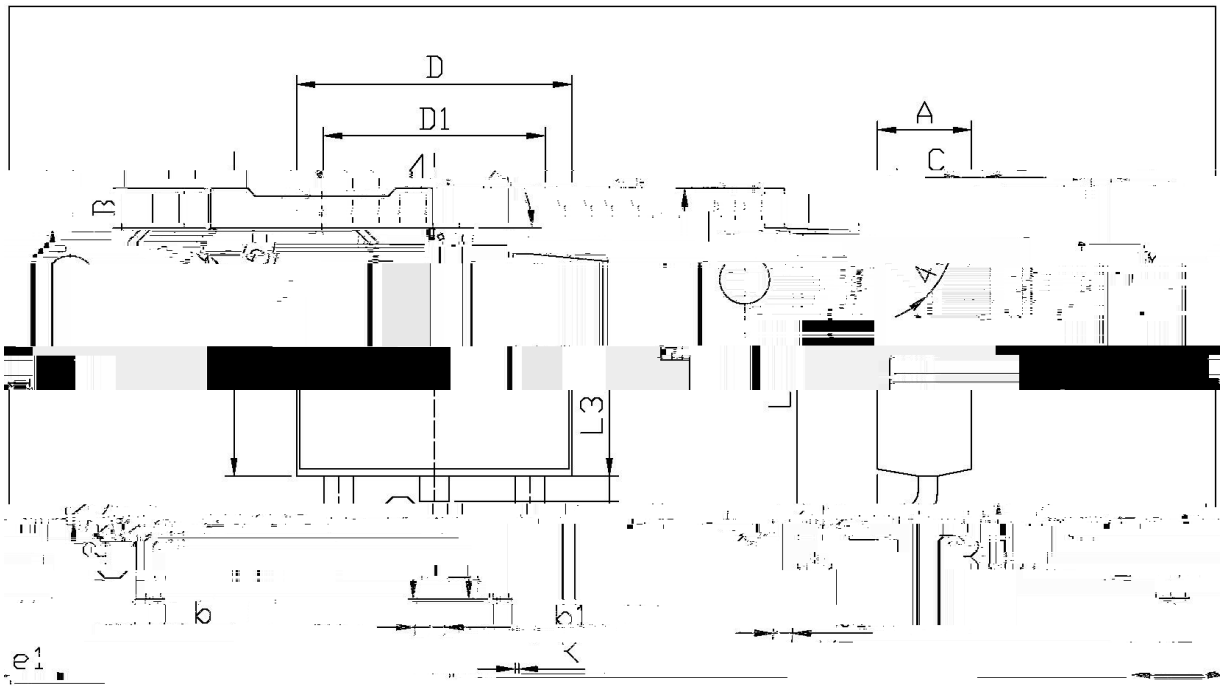
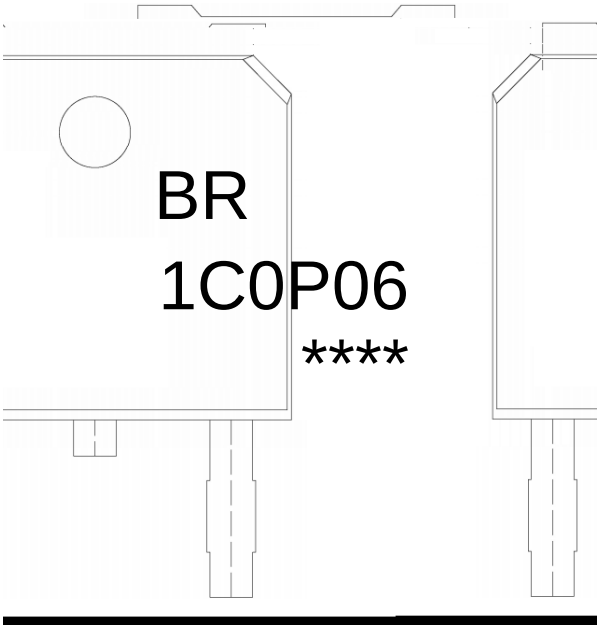


Figure 10: Normalized Maximum Transient Thermal Impedance



单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.10	2.50	D	2.70	3.10
B	0.95	1.25	e1	2.24	
b	0.70	0.90	e	1.40	
b1	0.75	0.85	h	0.25	
c	0.15	0.55	L	1.30	
D1	1.75	1.95	L3	0.60	
E	2.60	3.00	θ	0°	8°
E1	2.20	2.40			



BR

1C0P06

****

Note:

BR:	Company Code
1C0P06:	Product Type Code
****:	Lot No. Code, code change with Lot No

Temperature Profile for IR Reflow Soldering(Pb-Free)

			Note:
1	150 180	60 90sec;	1.Preheating:150~180 , Time:60~90sec.
2	245±5	5±0.5sec;	2.Peak Temp.:245±5 , Duration:5±0.5sec.
3		2 10 /sec.	3. Cooling Speed: 2~10 /sec.

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ REEL