/ Descriptions

SOT23-6

Complementary Enhancement MOSFET in a SOT23-6 Plastic Package.

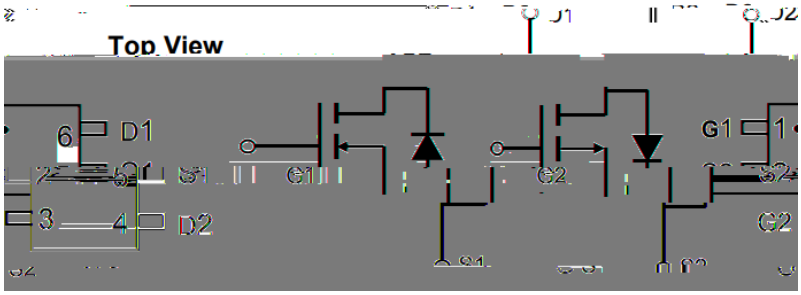
/ Features

N-channel	P-channel
V_{DS}(V)=20V	V_{DS}(V)=-20V
I_D=5.0A	I_D=-2.8A
$R_{DS(ON)}$@4.5V<30mΩ(TYP. 22mR)	$R_{DS(ON)}$@-4.5V<100mΩ(TYP. 78mR)
$R_{DS(ON)}$@2.5V<60(TYP. 30mR)	$R_{DS(ON)}$@-2.5V<150mΩ(TYP. 107mR)
HF Product.	

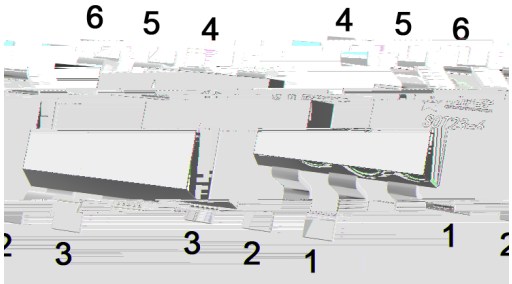
/ Applications

Power Management in Notebook computer, Portable Equipment and Battery powered systems.

/ Equivalent Circuit



/ Pinning



PIN1	G1	PIN 2	S2	PIN 3	G2
PIN 4	D2	PIN 5	S1	PIN 6	D1

/ Marking

See Marking Instructions.

Parameter	Symbol	Rating		Unit
		N-channe	P-channell	
Drain-Source Voltage	V_{DSS}	20	-20	V
Gate-Source Voltage	V_{GSS}	±12		V
Continuous Drain Current	I_D	5.0	-2.8	A
Pulsed Drain Current	I_{DM}	20.4	-11.7	A
Power Dissipation	P_D	1.2	1.2	W
Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150		
Maximum Junction-to-Ambient	$R_{\theta JA}$	104		/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	BV_{DSS}	V_{GS}				

N- / N-CHANNEL Electrical Characteristic Curve

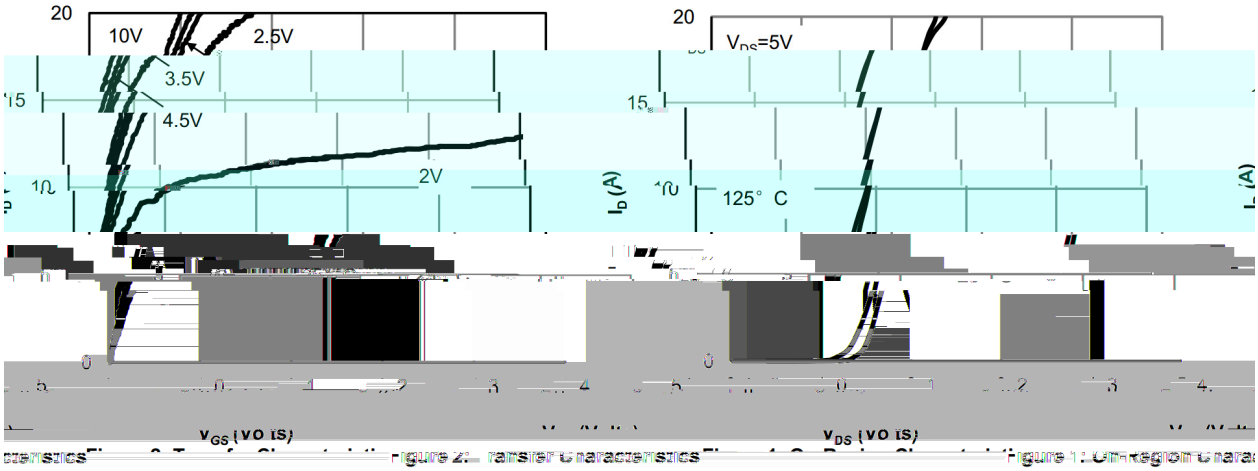
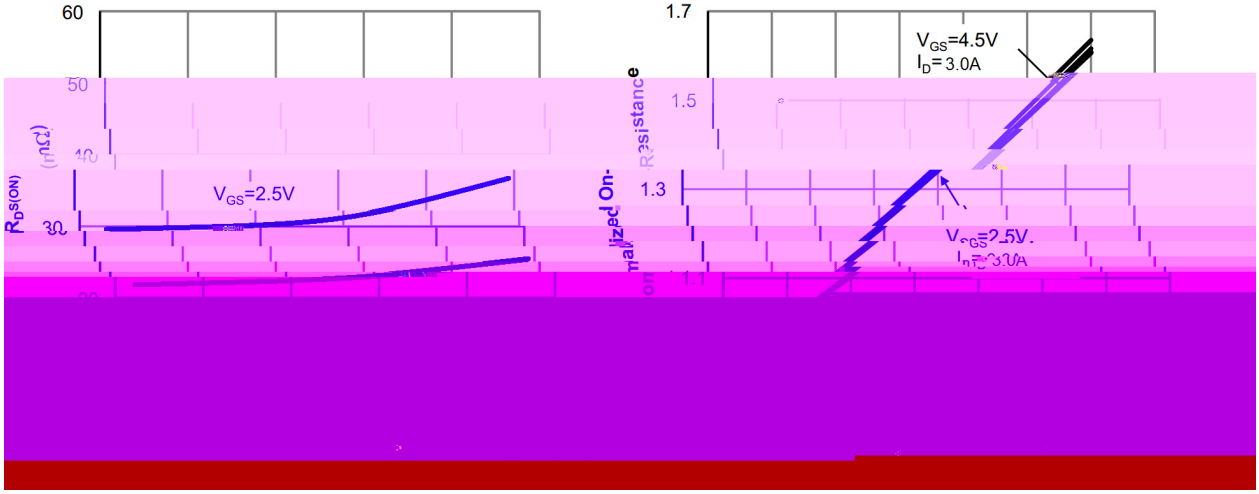


Figure 2. Transfer Characteristics Figure 1. Output Characteristics



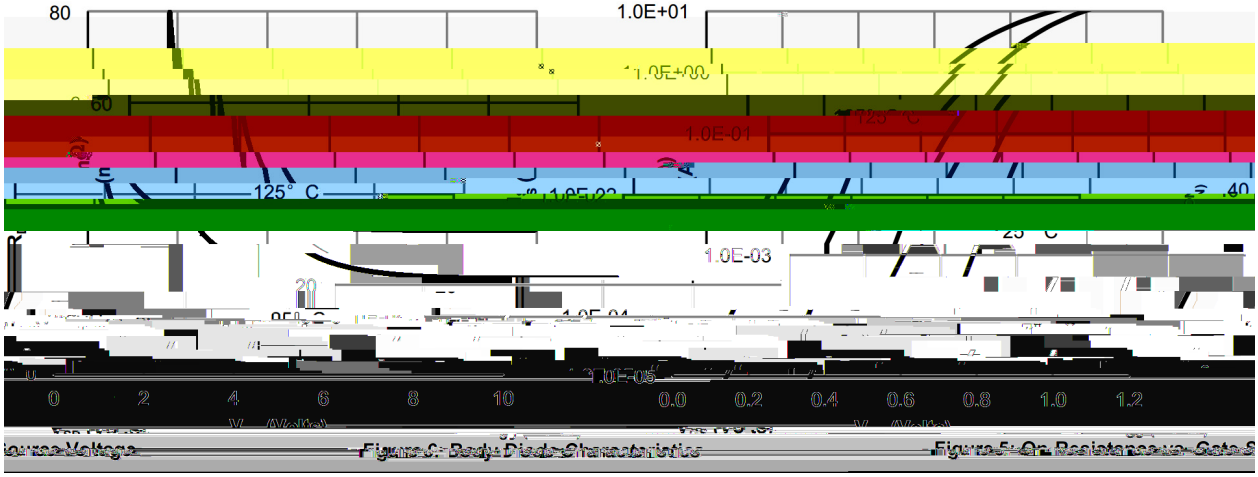
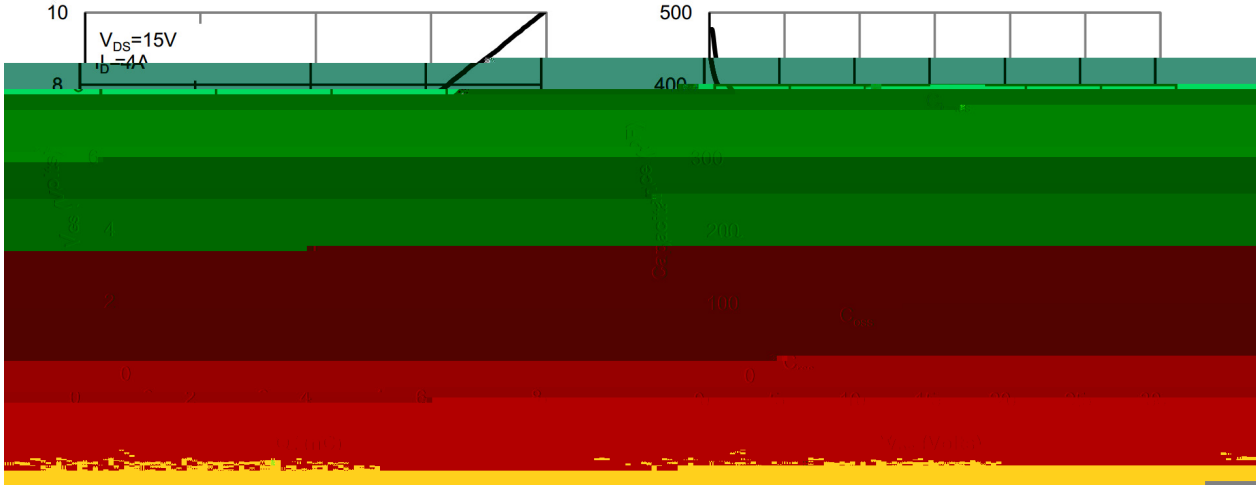
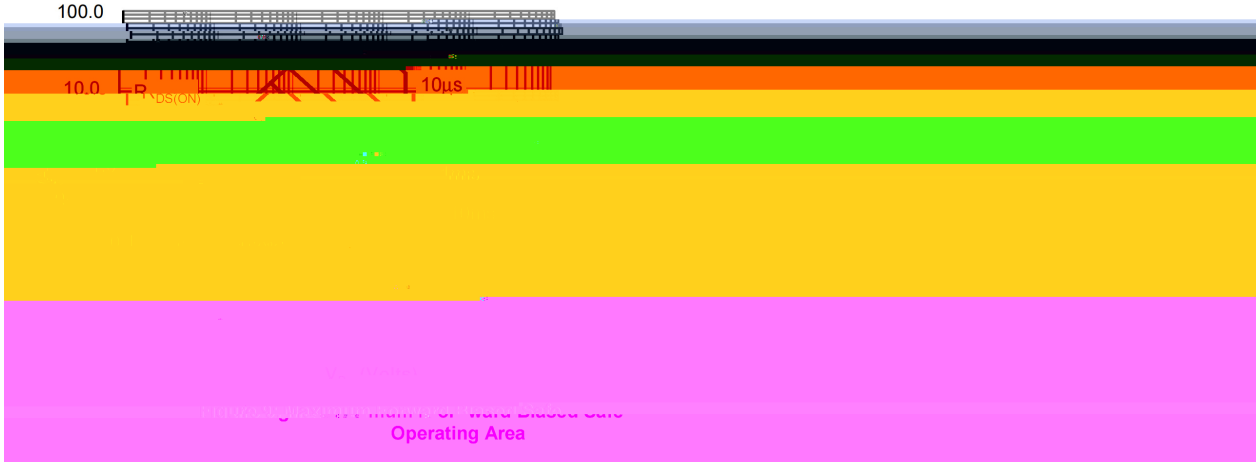
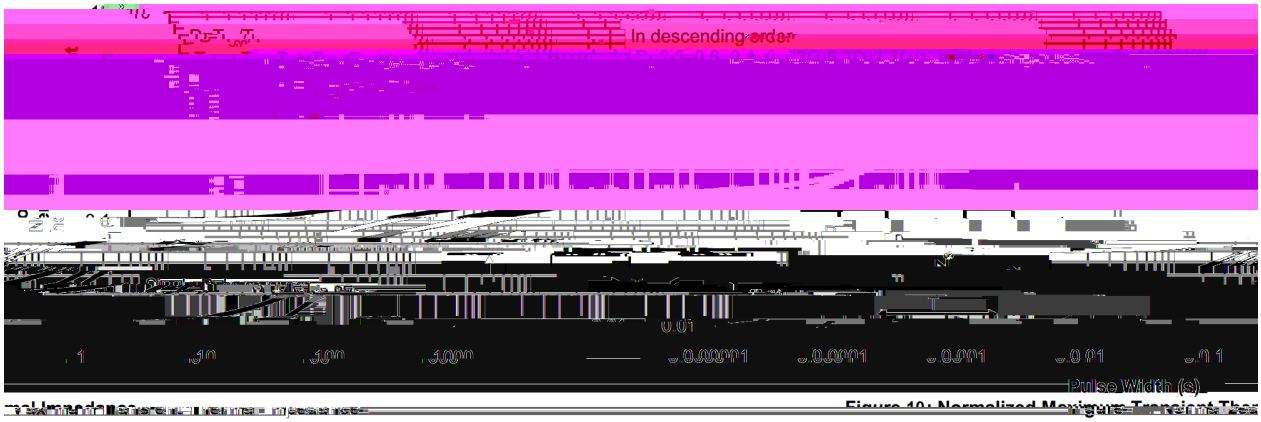


Figure 3. Body Diode Characteristics Figure 4. On-Resistance vs. Gate-S

N- / N-CHANNEL Electrical Characteristic Curve







P- / P-CHANNEL Electrical Characteristic Curve

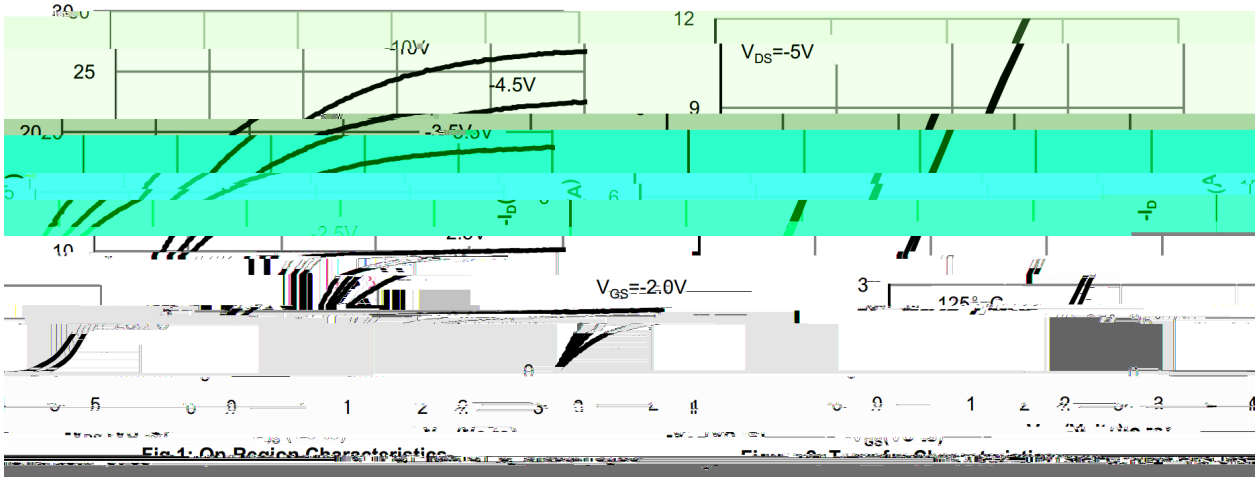
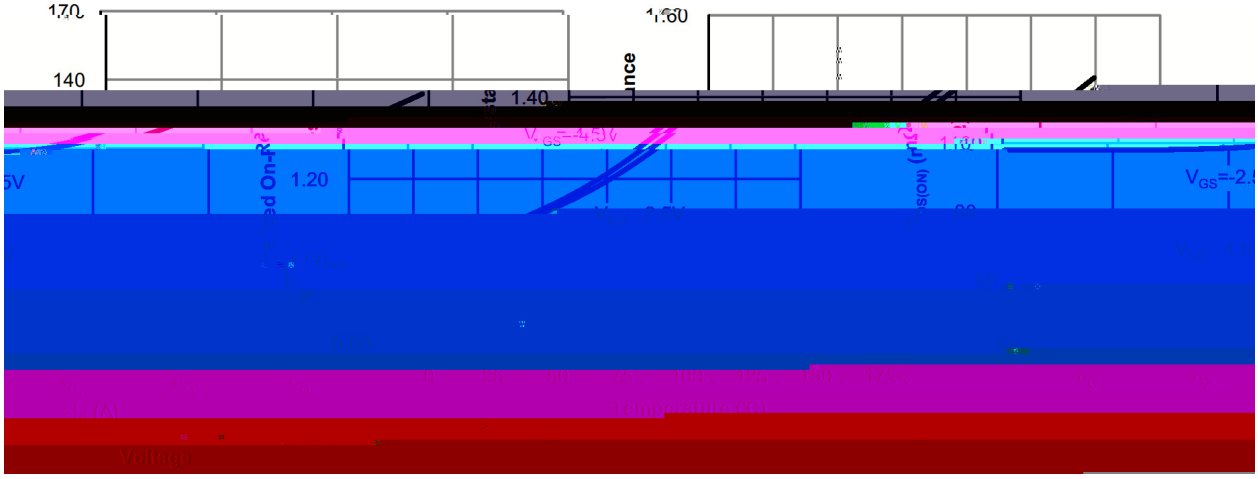
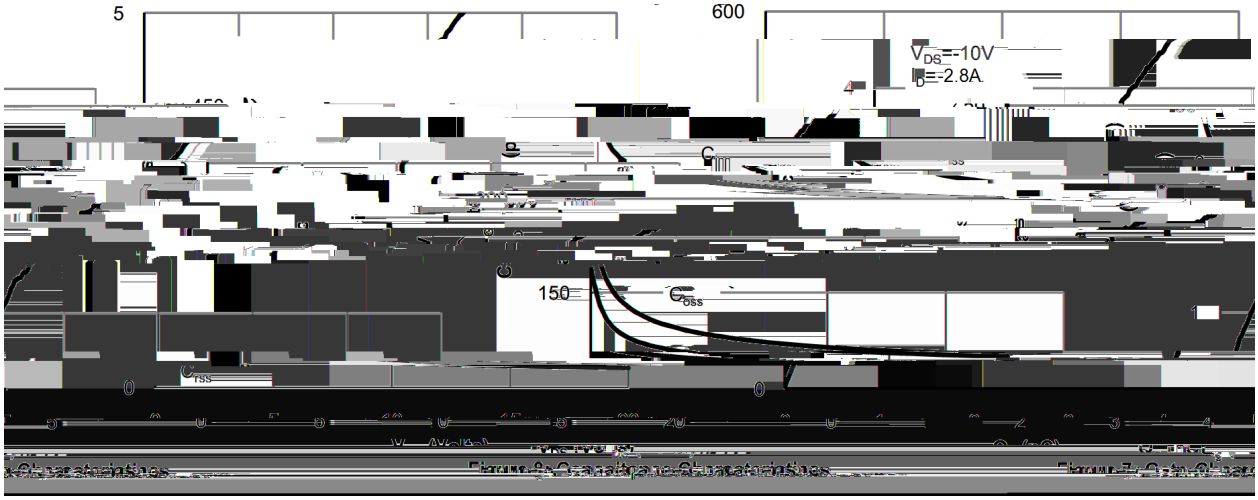
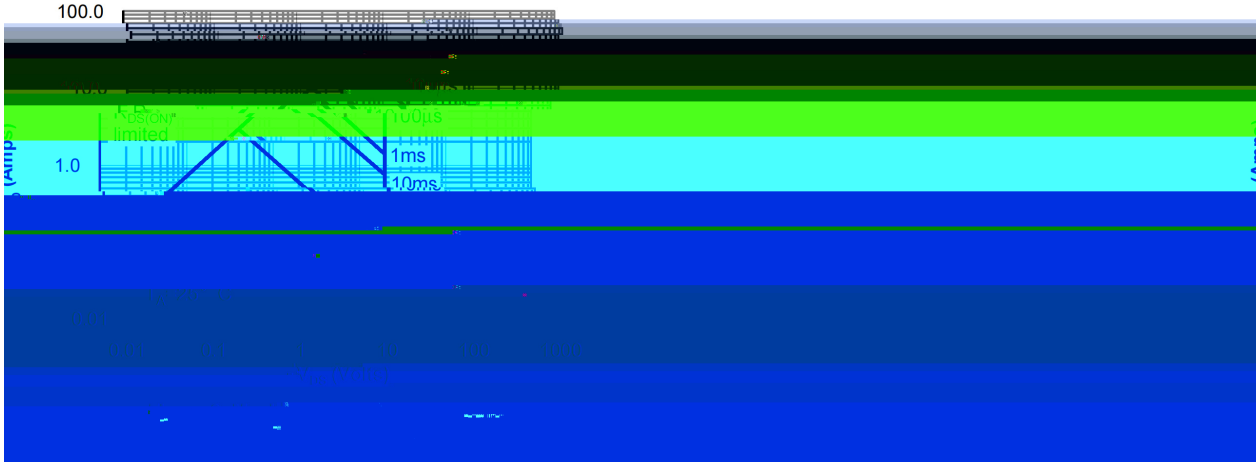


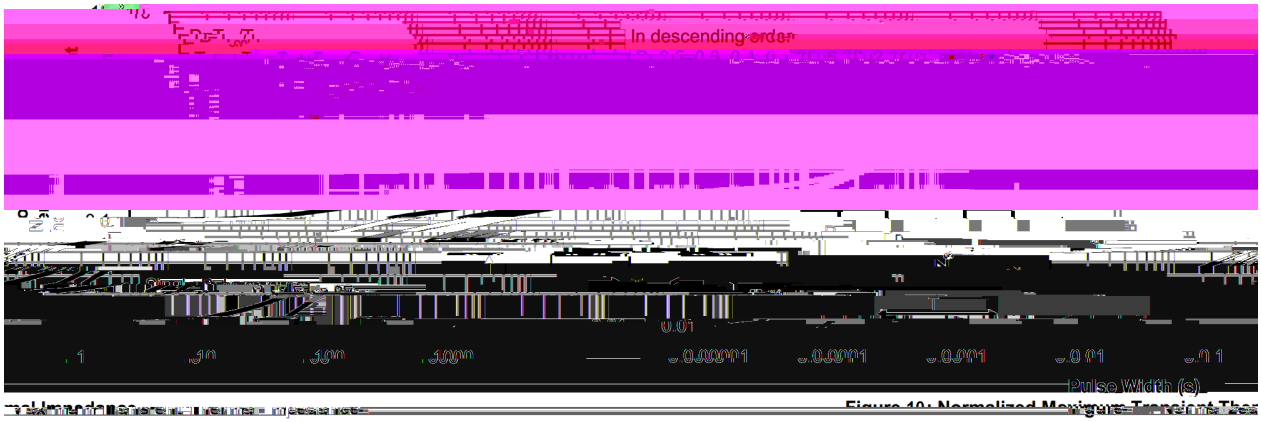
Fig.1: On-Region Characteristics



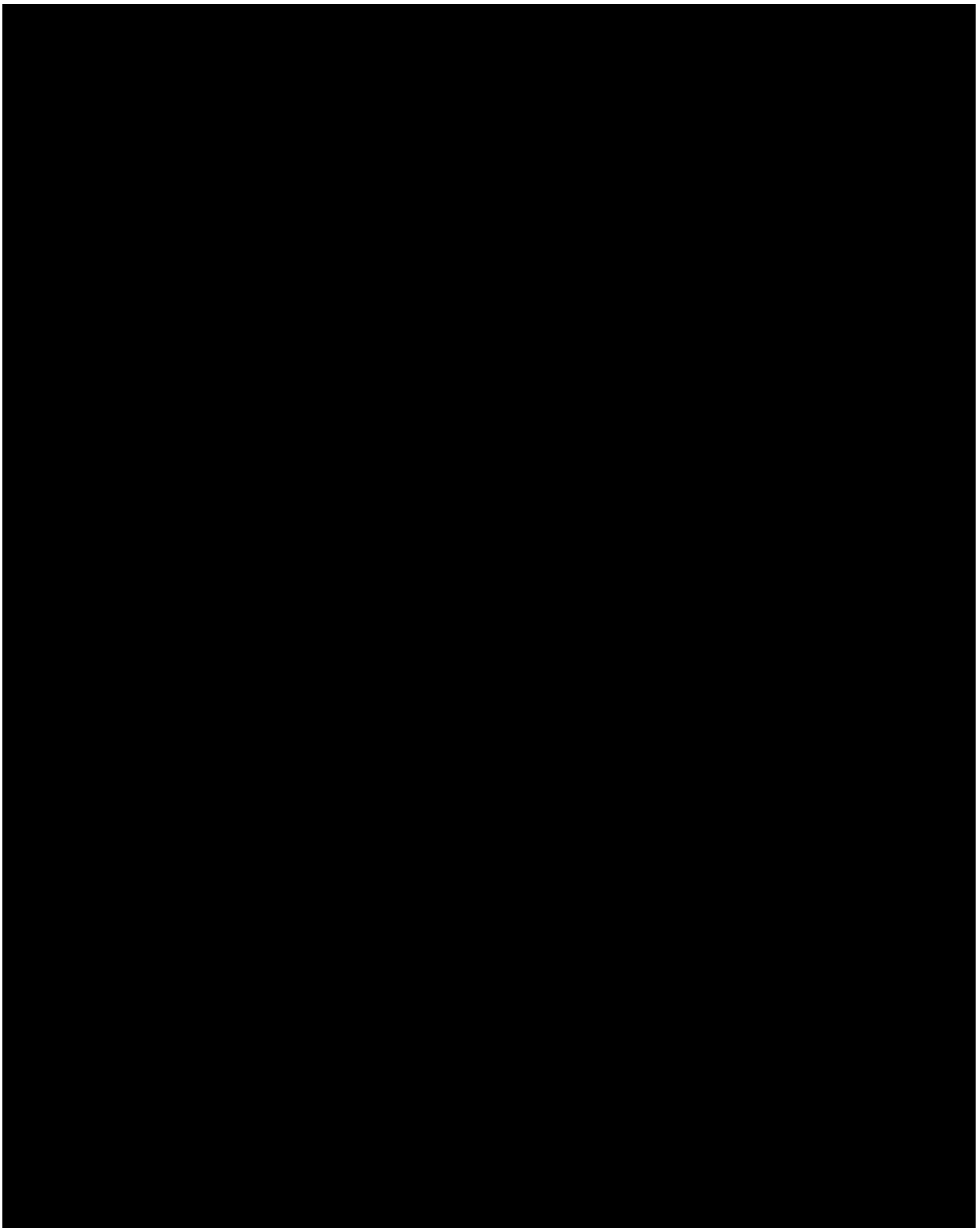
P- / P-CHANNEL Electrical Characteristic Curve







/ Package Dimensions



BRCS300C02MF

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

1 150 180 60