



Part Number      Package  
                         TO-252

Parameter		Value
Continuous Drain Current (Silicon Limited)	$I_D$	
Drain to Source Voltage		
Avalanche Energy, Single Pulse		

				25	-	
				6	-	nC
				8	-	
Turn on Delay Time	$t_{d(on)}$			7	-	
Rise time	$t_r$	$V_{DD}=50V, I_D=20A, V_{GS}=10V,$		4	-	
Turn off Delay Time	$t_{d(off)}$	$R_G=10 \Omega$		19	-	ns
Fall Time	$t_f$			3	-	

### Reverse Diode Characteristics

Diode Forward Voltage	$V_{SD}$	$V_{GS}=0V, I_F=20A$		0.9	1.2	V

Fig 1. Typical Output Characteristics

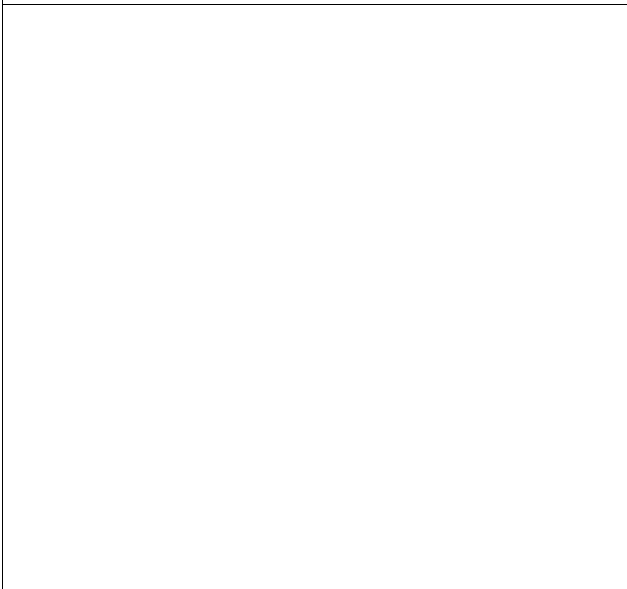


Figure 2. On-Resistance vs. Gate-Source Voltage

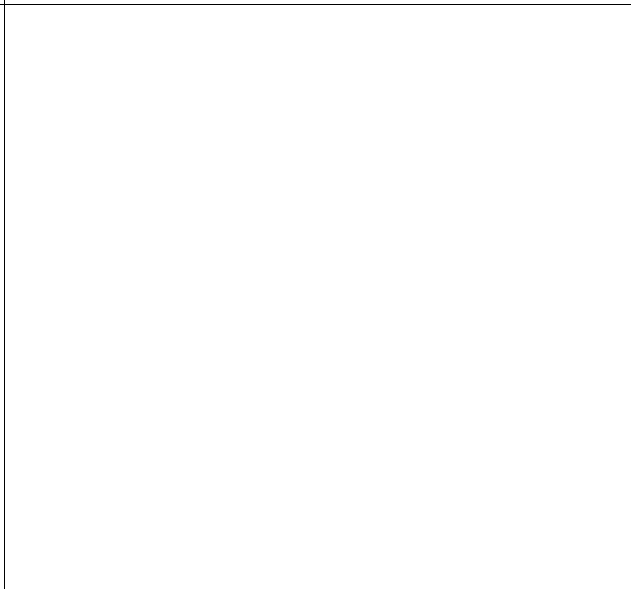


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

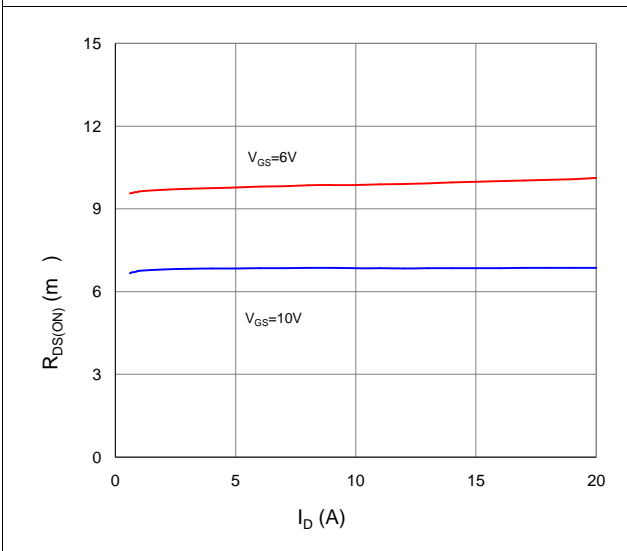


Figure 4. Normalized On-Resistance vs. Junction Temperature

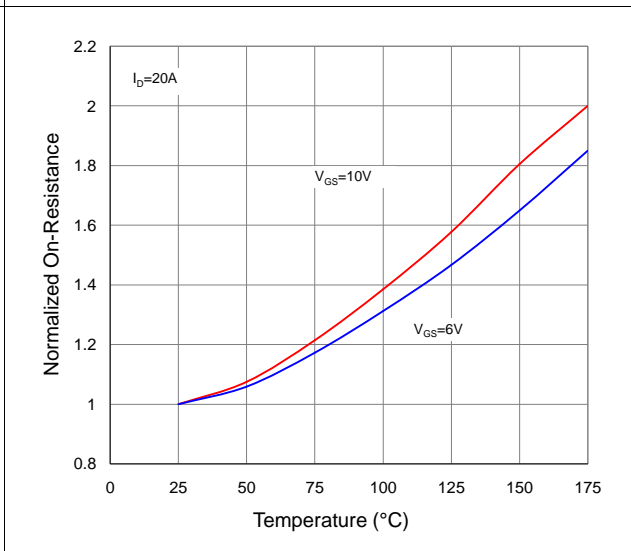


Figure 5. Typical Transfer Characteristics

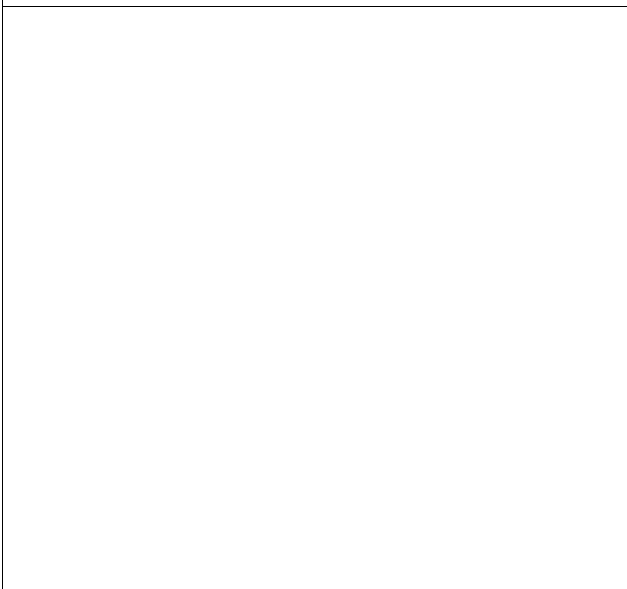


Figure 6. Typical Source-Drain Diode Forward Voltage

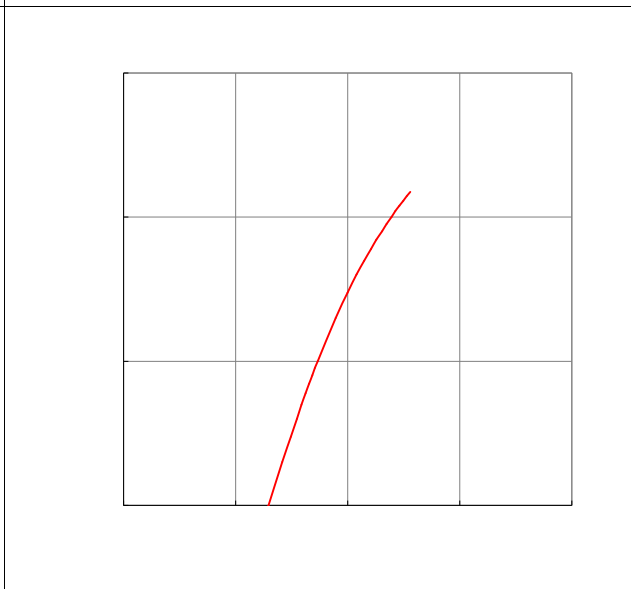


Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

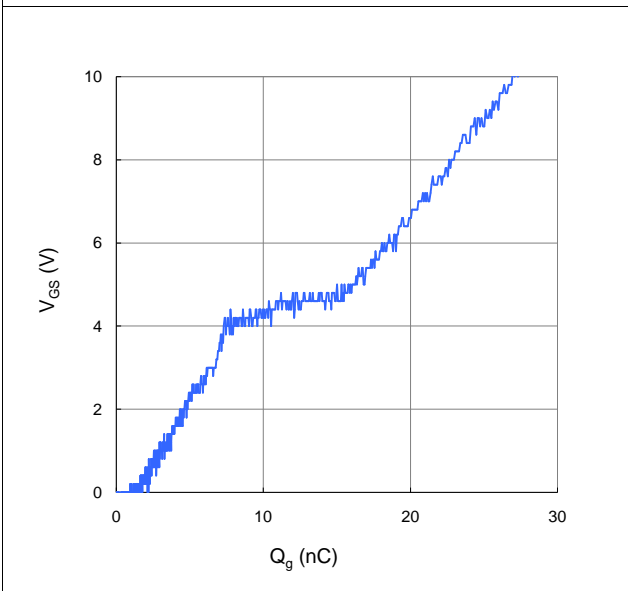


Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

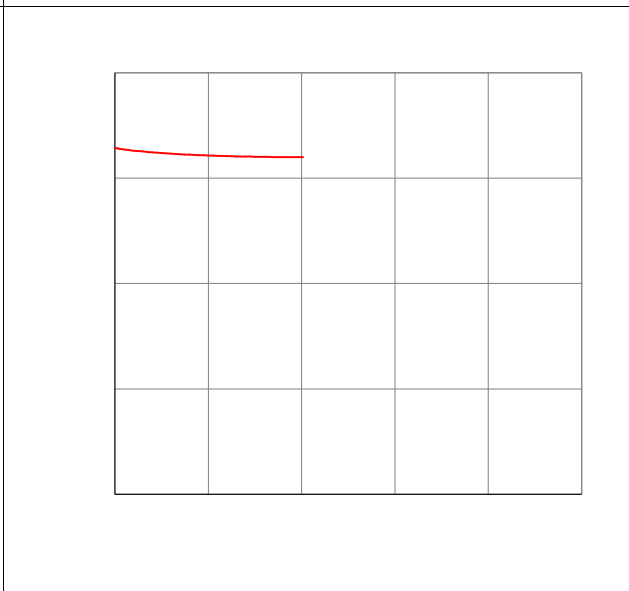


Figure 9. Maximum Safe Operating Area

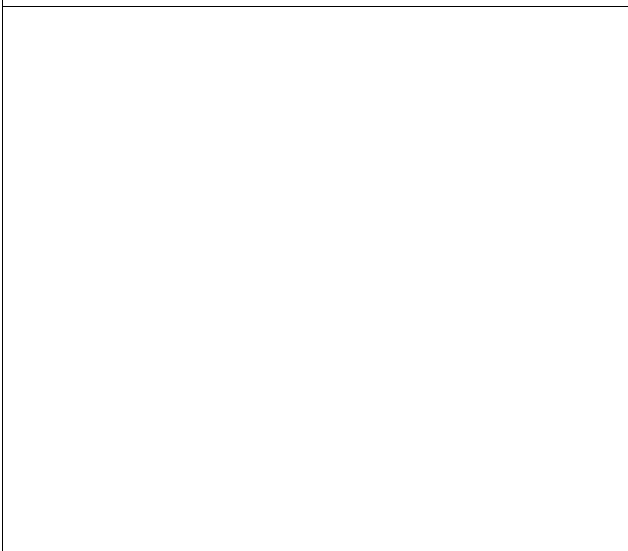


Figure 10. Maximun Drain Current vs. Case Temperature

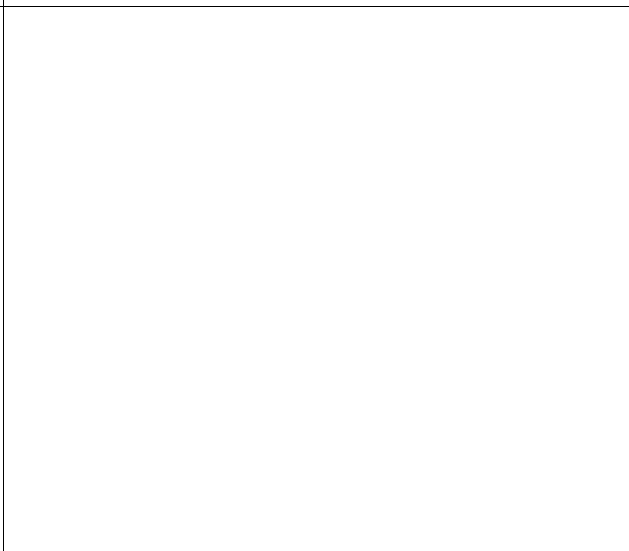
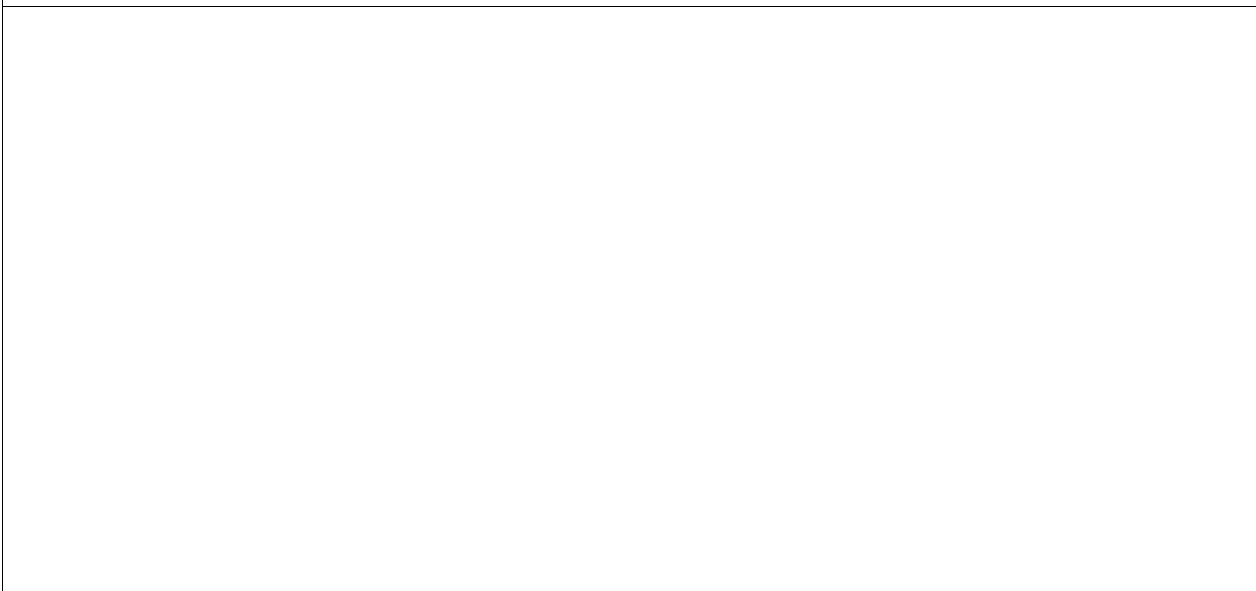
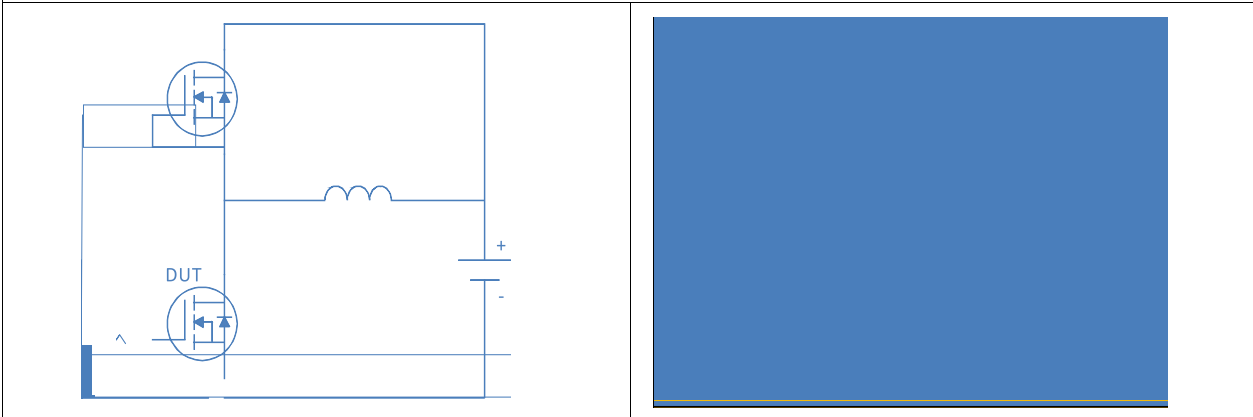


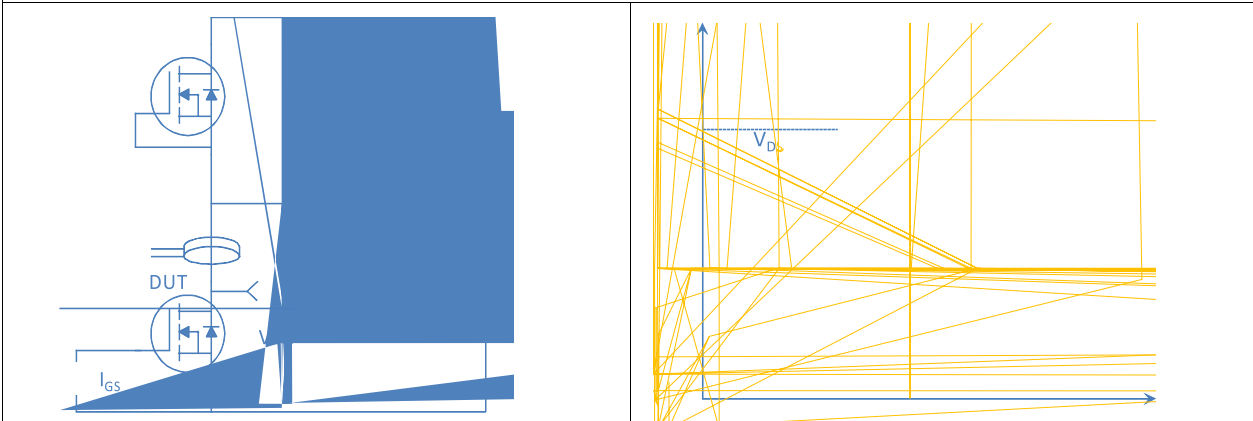
Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Ambient



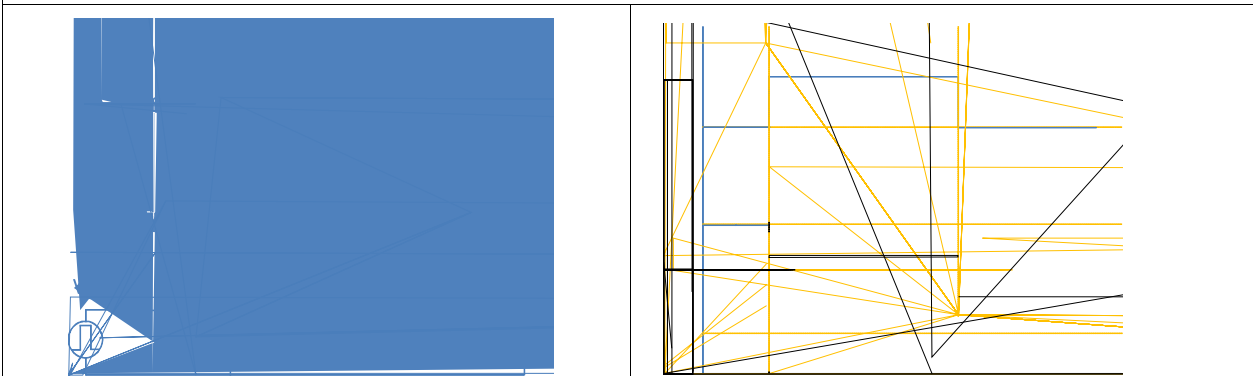
Inductive switching Test



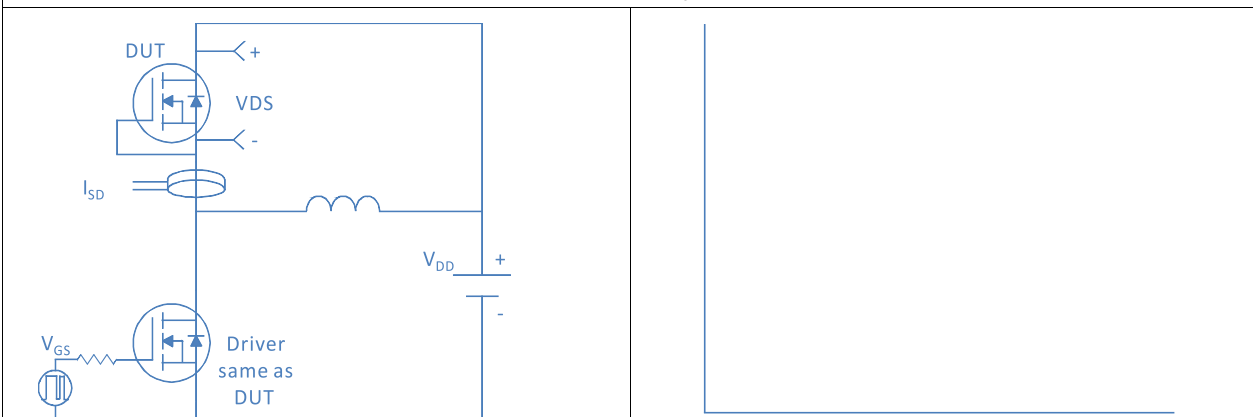
Gate Charge Test



Uclamped Inductive Switching (UIS) Test



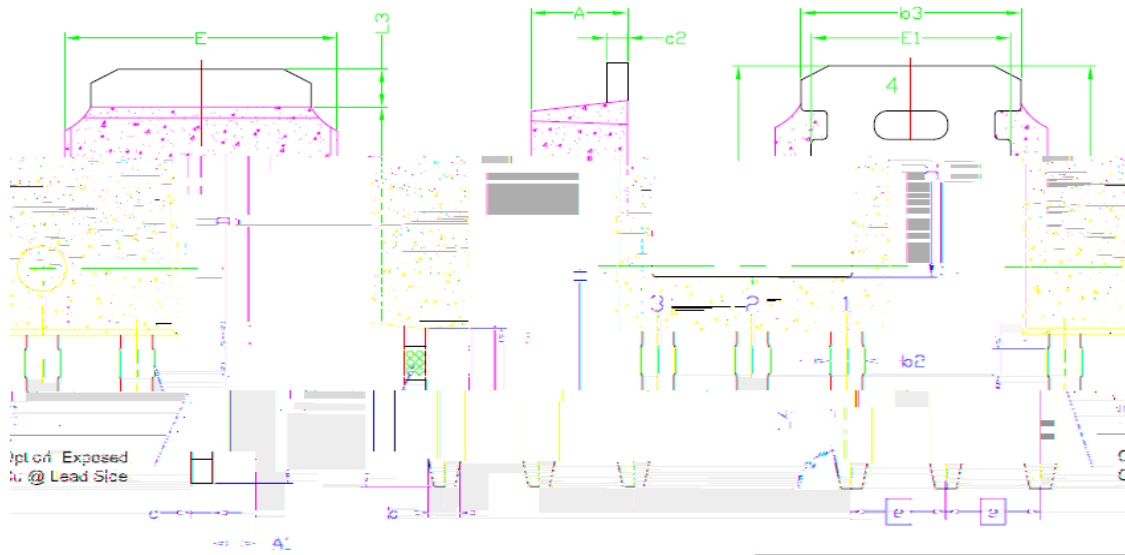
Diode Recovery Test





Package Outline

TO-251, 3leads



SYMBOL	DIMENSIONAL REQMTS		
	MIN	NDM	MAX
E	6.40	6.60	6.731
L	3.98	4.13	4.28
L3	0.89	--	1.27
L4	0.698 REF		
L5	0.972	1.099	1.226
D	6.00	6.10	6.223
H	11.05	11.25	11.45
b	0.64	0.76	0.88
b2	0.77	0.84	1.14
b3	5.21	5.34	5.46
e	2.286 BSC		
A	2.20	2.30	2.38
A1	0.89	1.04	1.15
c	0.46	0.50	0.60
c2	0.46	0.50	0.60
D1	5.10	--	--
E1	4.40	--	--
a	79° REF		