



**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	10	C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	170	C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	C

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=250\mu A$	20			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS}=V_{DS}, I_D=250\mu A$	0.45	0.6	1	V
Drain-Source Leakage Current	I_{DSS}	$V_{DS}=16V, V_{GS}=0V$			1.0	μA
Gate- Source Leakage Current	I_{GSS}	$V_{GS}=\pm 8V, V_{DS}=0V$			± 100	nA
Static Drain-source On Resistance		$V_{GS}=4.5V, I_D=6A$		16	20	m Ω
		$V_{GS}=2.5V, I_D=6A$		19	25	m Ω
Forward Transconductance	g_{FS}	$V_{DS}=10V, I_D=1A$		50		S
Source-drain voltage	V_{SD}	$I_S=6A$			1.28	V

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	C_{iss}	$f = 1MHz$	-	1295	-	



Fig.1 Power Dissipation Derating Curve

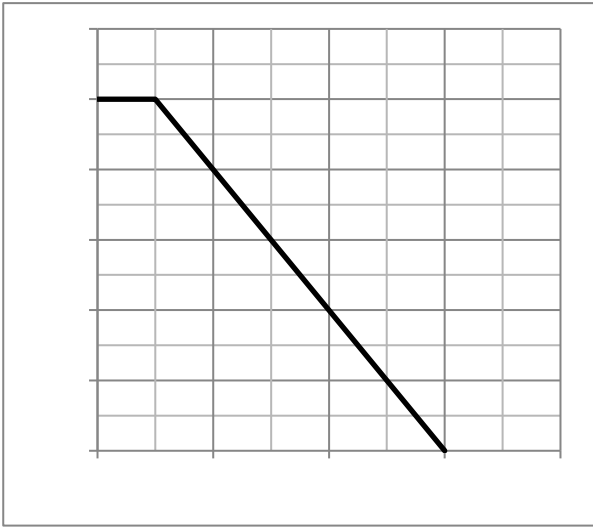


Fig.2 Typical output Characteristics

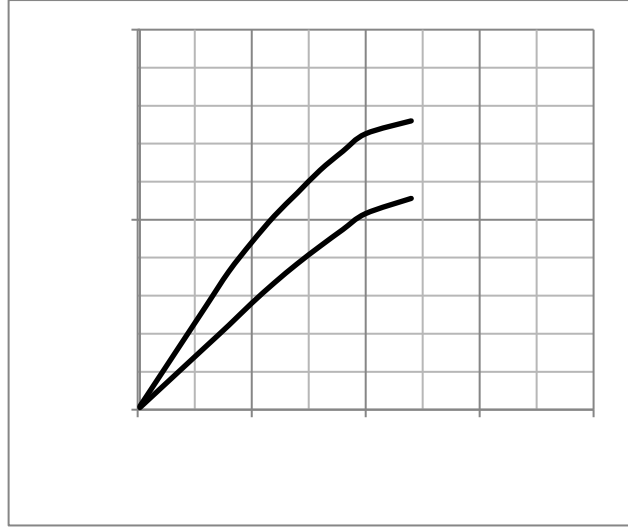


Fig.3 Threshold Voltage V.S Junction Temperature

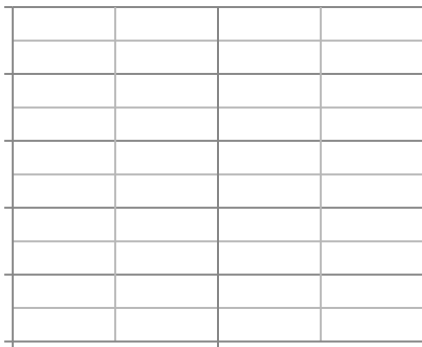


Fig.4 Resistance V.S Drain Current



Fig.7 Switching Time Measurement Circuit

Fig.8 Gate Charge Waveform

Fig.9 Switching Time Measurement Circuit

Fig.



(SOT23-6)

Unit mm

