



**Ordering Information:**

**Absolute Maximum Ratings  $T_C = 25$**

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	150	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
	$I_D @ T_C = 25^\circ C$	4.2	A

Continuous Drain Current

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	$R_{thJC}$	-	-	34	$^{\circ}C/W$
Thermal resistance, junction - ambient	$R_{thJA}$	-	-	180	$^{\circ}C/W$
Soldering temperature, wavesoldering for 10s	$T_{sold}$	-	-	265	$^{\circ}C$

**Electronic Characteristics**

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	150			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 250\mu A$	2.0		4.0	V
Drain-Source Leakage Current	$I_{DSS}$	$V_{DS} = 150V, V_{GS} = 0V$			1.0	$\mu A$
Gate- Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 20V, V_{DS} = 0V$			$\pm 100$	nA
Static Drain-source On Resistance		$V_{GS} = 10V, I_D = 20A$		60	78	m $\Omega$
Forward Transconductance	$g_{FS}$	$V_{DS} = 10V, I_D = 20A$		4		s
Source-drain voltage	$V_{SD}$	$I_S = 20A$			1.28	V

**Electronic Characteristics**

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	$C_{iss}$	f = 1MHz	-	1700	-	$\mu F$
Output capacitance	$C_{oss}$		-	85	-	
Reverse transfer capacitance	$C_{rss}$		-	49	-	

**Gate Charge characteristics ( $T_a = 25^{\circ}C$ )**

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge						



Fig.1 Power Dissipation Derating Curve

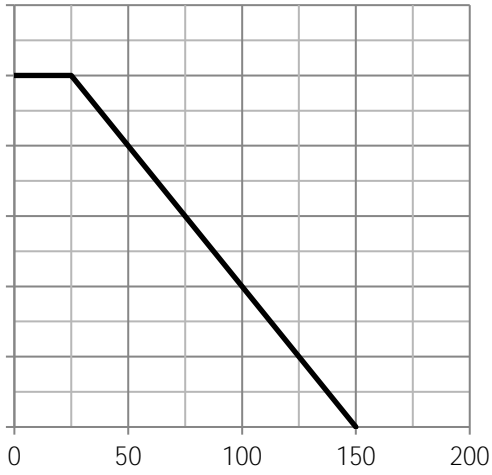


Fig.2 Typical output Characteristics

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.10 Gate Charge Waveform

Fig.11 Avalanche Measurement Circuit

Fig.12 Avalanche Waveform

**Dimensions(SOP8)**

Unit: mm

SYMBOL	min	TYP	max	SYMBOL	min		max
A	4.80		5.25	C	1.30		1.75
A1	0.37		0.49	C1	0.55		0.75
A2		1.27		C2	0.55		0.65
A3		0.41		C3	0.05		0.20
B	5.80		6.20	C4	0.10	0.20	0.23
B1	3.80		4.10	D		1.05	
B2		5.00		D1	0.40		0.62

