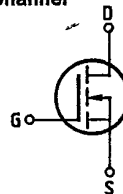


Main ratings

Drain-source voltage $V_{DS} = 400 \text{ V}$
Continuous drain current $I_D = 9,6 \text{ A}$
Drain-source on-resistance $R_{DS(on)} = 0,4 \Omega$

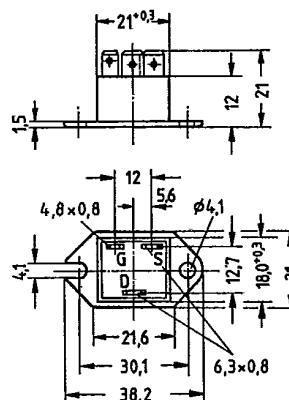
N-Channel



Description SIPMOS, N-channel, enhancement mode

Case Plastic package TO 238 AA with insulated metal base plate in accordance with JEDEC, compatible with TO 3; AMP plug-in connections.
Approx. weight 21 g

Type	Ordering code
BUZ 67	C67078-A1610-A2



Dimensions in mm

Maximum ratings

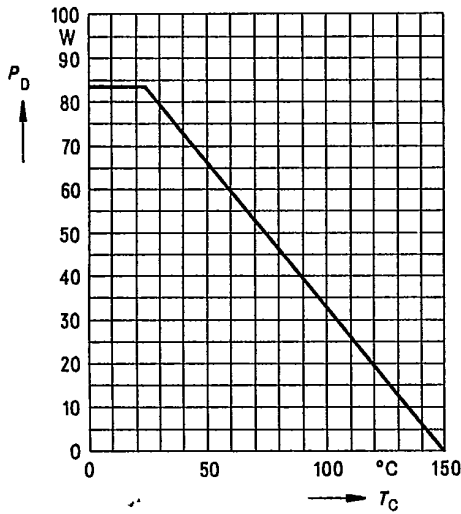
Description	Symbols	Ratings	Units	Conditions
Drain-source voltage	V_{DS}	400	V	
Drain-gate voltage	V_{DGR}	400	V	$R_{GS} = 20 \text{ k}\Omega$
Continuous drain current	I_D	9,6	A	$T_C = 25^\circ\text{C}$
Pulsed drain current	I_{Dpuls}	38	A	$T_C = 25^\circ\text{C}$
Gate-source voltage	V_{GS}	± 20	V	
Max. power dissipation	P_D	83,3	W	$T_C = 25^\circ\text{C}$
Operating and storage temperature range	T_j T_{stg}	$-40 \dots +150$	$^\circ\text{C}$	
Isolation test voltage	V_{is}	3500	Vdc ¹⁾	$t = 1 \text{ min}$
DIN humidity category		F	-	DIN 40040
IEC climatic category		40/150/56	-	DIN IEC 68-1

Thermal resistance

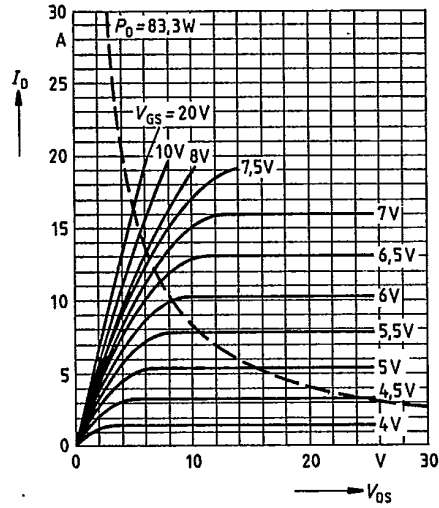
Chip - case | R_{thJC} | $\leq 1,5$ | K/W |

¹⁾ Isolation test voltage between drain and base plate referred to standard climate 23/50 in accordance with DIN 50014.

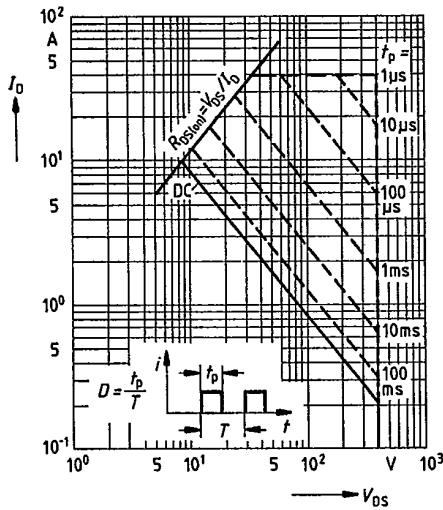
Power dissipation $P_D = f(T_C)$



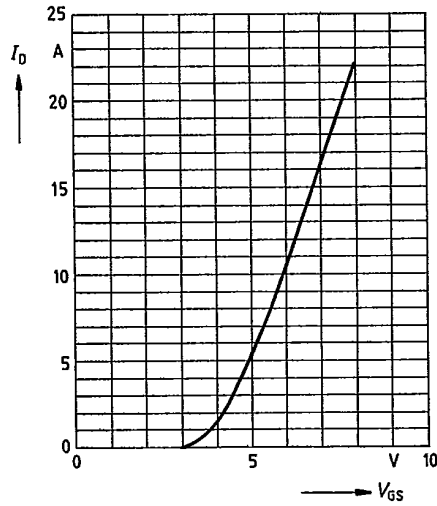
Typical output characteristics $I_D = f(V_{DS})$
parameter: 80 μ s pulse test,
 $T_I = 25^\circ\text{C}$



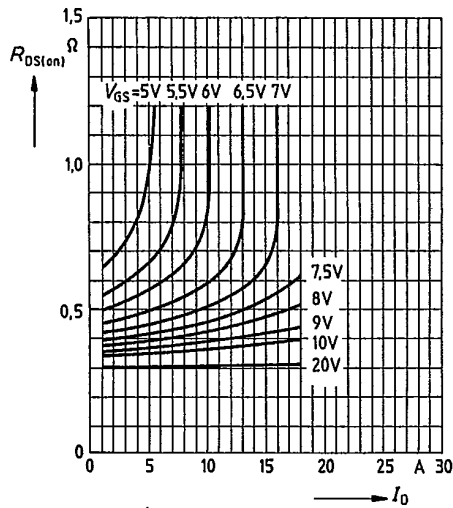
Safe operating area $I_D = f(V_{DS})$
parameter: $D = 0.01$, $T_C = 25^\circ\text{C}$



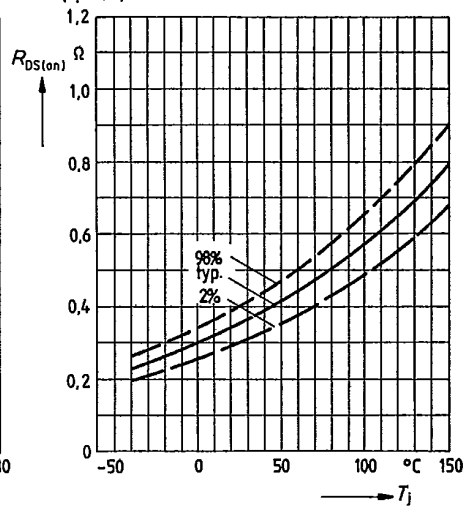
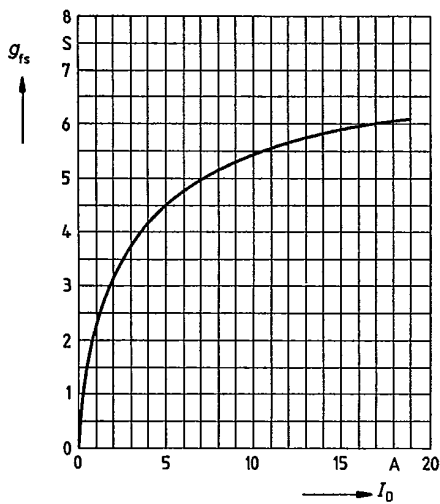
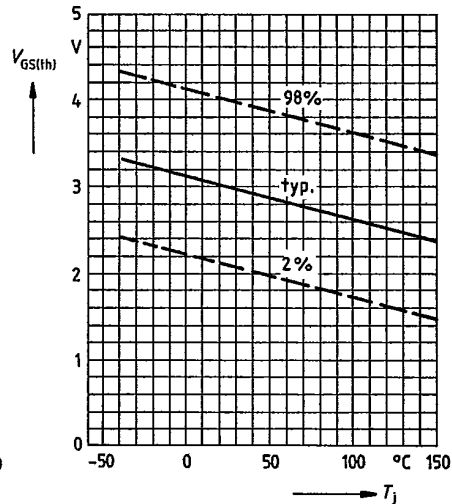
Typical transfer characteristic $I_D = f(V_{GS})$
parameter: 80 μ s pulse test,
 $V_{DS} = 25\text{V}$, $T_I = 25^\circ\text{C}$



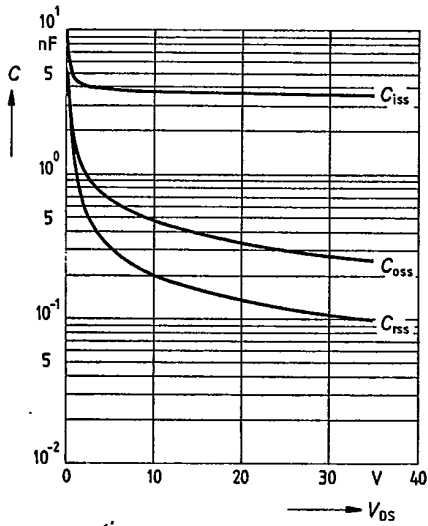
Typical drain-source on-state resistance

 $R_{DS(on)} = f(I_D)$
 parameter: V_{GS} ; $T_J = 25^\circ\text{C}$


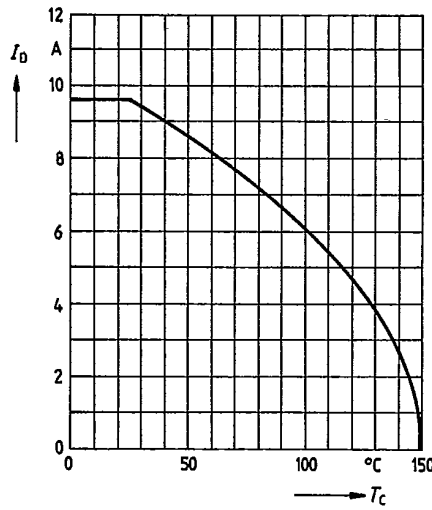
Drain-source on-state resistance

 $R_{DS(on)} = f(T_J)$
 parameter: $I_D = 5.5\text{A}$, $V_{GS} = 10\text{V}$
 (spread)
Typical transconductance $g_{fs} = f(I_D)$
 parameter: 80 μs pulse test,
 $V_{DS} = 25\text{V}$, $T_J = 25^\circ\text{C}$
Gate threshold voltage $V_{GS(th)} = f(T_J)$
 parameter: $V_{DS} = V_{GS}$, $I_D = 1\text{mA}$
 (spread)


Typical capacitances $C = f(V_{DS})$
parameter: $V_{GS} = 0$, $f = 1\text{MHz}$

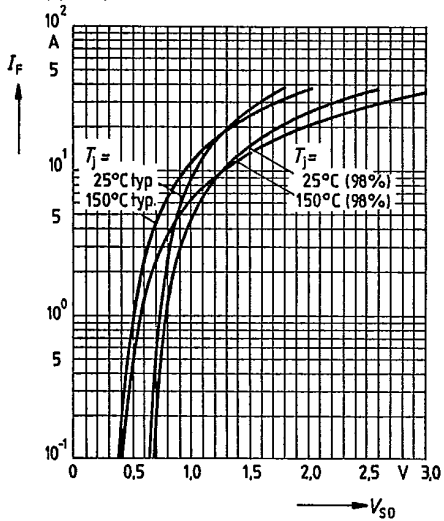


Continuous drain current $I_D = f(T_C)$
parameter: $V_{GS} \geq 10\text{V}$

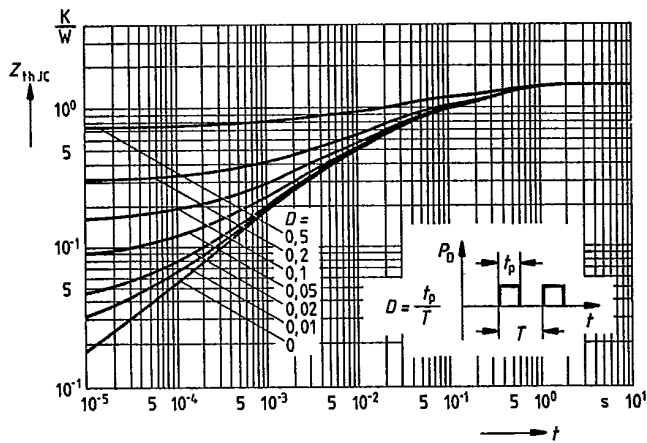


Forward characteristic of reverse diode

$I_F = f(V_{SD})$
parameter: $T_j, t_p = 80 \mu\text{s}$
(spread)



Transient thermal impedance $Z_{thJC} = f(t)$
parameter: $D = t_p/T$



Typical gate-charge $V_{GS} = f(Q_{Gate})$
parameter: $I_{D\ puls} = 17,3A$

