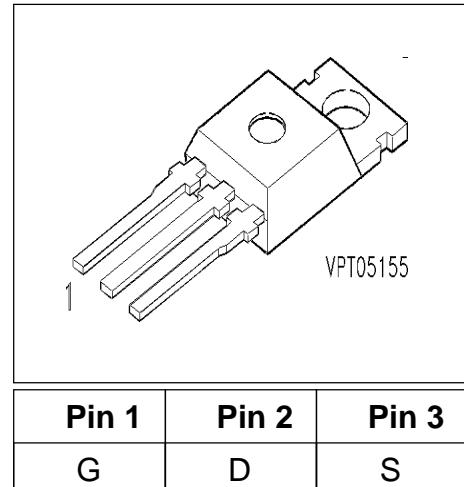


SIPMOS® Power Transistor

- N channel
- Enhancement mode



Type	V_{DS}	I_D	$R_{DS(on)}$	Package	Ordering Code
BUZ 80A	800 V	3 A	3 Ω	TO-220 AB	C67078-A1309-A3

Maximum Ratings

Parameter	Symbol	Values	Unit
Drain source voltage	V_{DS}	800	V
Drain-gate voltage	V_{DGR}		
$R_{GS} = 20 \text{ k}\Omega$		800	
Continuous drain current	I_D		A
$T_C = 50^\circ\text{C}$		3	
Pulsed drain current	I_{Dpuls}		
$T_C = 25^\circ\text{C}$		12	
Gate source voltage	V_{GS}	± 20	V
Power dissipation	P_{tot}		W
$T_C = 25^\circ\text{C}$		75	
Operating temperature	T_j	-55 ... + 150	°C
Storage temperature	T_{stg}	-55 ... + 150	
Thermal resistance, chip case	R_{thJC}	≤ 1.67	K/W
Thermal resistance, chip to ambient	R_{thJA}	75	
DIN humidity category, DIN 40 040		E	
IEC climatic category, DIN IEC 68-1		55 / 150 / 56	

Electrical Characteristics, at $T_j = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Values			Unit
		min.	typ.	max.	

Static Characteristics

Drain- source breakdown voltage $V_{GS} = 0 \text{ V}, I_D = 0.25 \text{ mA}, T_j = 25^\circ\text{C}$	$V_{(\text{BR})\text{DSS}}$	800	-	-	V
Gate threshold voltage $V_{GS}=V_{DS}, I_D = 1 \text{ mA}$	$V_{GS(\text{th})}$	2.1	3	4	
Zero gate voltage drain current $V_{DS} = 800 \text{ V}, V_{GS} = 0 \text{ V}, T_j = 25^\circ\text{C}$ $V_{DS} = 800 \text{ V}, V_{GS} = 0 \text{ V}, T_j = 125^\circ\text{C}$	I_{DSS}	-	20	250	μA
		-	100	1000	
Gate-source leakage current $V_{GS} = 20 \text{ V}, V_{DS} = 0 \text{ V}$	I_{GSS}	-	10	100	nA
Drain-Source on-resistance $V_{GS} = 10 \text{ V}, I_D = 1.5 \text{ A}$	$R_{\text{DS}(\text{on})}$	-	2.7	3	Ω