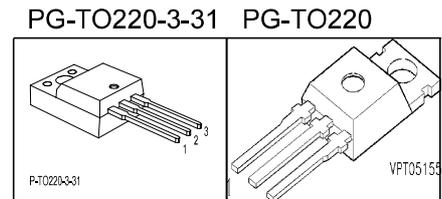


Cool MOS™ Power Transistor

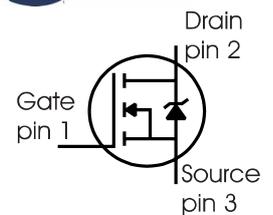
Feature

- New revolutionary high voltage technology
- Worldwide best $R_{DS(on)}$ in TO 220
- Ultra low gate charge
- Periodic avalanche rated
- Extreme dv/dt rated
- Ultra low effective capacitances
- Improved transconductance
- PG-TO-220-3-31: Fully isolated package (2500 VAC; 1 minute)
- Pb-free lead plating; RoHS compliant
- Qualified according to JEDEC⁰⁾ for target applications

V_{DS}	800	V
$R_{DS(on)}$	0.29	Ω
I_D	17	A



Type	Package	Ordering Code	Marking
SPP17N80C3	PG-TO220	Q67040-S4353	17N80C3
SPA17N80C3	PG-TO220-3-31	SP000216353	17N80C3



Maximum Ratings

Parameter	Symbol	Value		Unit
		SPP	SPA	
Continuous drain current $T_C = 25\text{ }^\circ\text{C}$ $T_C = 100\text{ }^\circ\text{C}$	I_D	17 11	17 ¹⁾ 11 ¹⁾	A
Pulsed drain current, t_p limited by T_{jmax}	$I_{D\text{ puls}}$	51	51	A
Avalanche energy, single pulse $I_D=3.4\text{A}$, $V_{DD}=50\text{V}$	E_{AS}	670	670	mJ
Avalanche energy, repetitive t_{AR} limited by T_{jmax} ²⁾ $I_D=17\text{A}$, $V_{DD}=50\text{V}$	E_{AR}	0.5	0.5	
Avalanche current, repetitive t_{AR} limited by T_{jmax}	I_{AR}	17	17	A
Gate source voltage	V_{GS}	± 20	± 20	V
Gate source voltage AC ($f > 1\text{Hz}$)	V_{GS}	± 30	± 30	
Power dissipation, $T_C = 25\text{ }^\circ\text{C}$	P_{tot}	208	42	W
Operating and storage temperature	T_j, T_{stg}	-55...+150		$^\circ\text{C}$