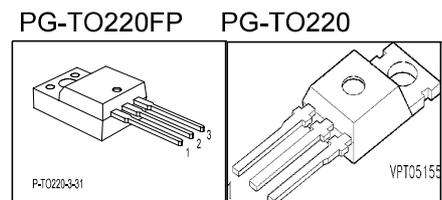


## Cool MOS™ Power Transistor

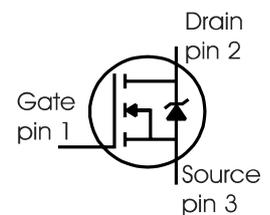
### Feature

- New revolutionary high voltage technology
- Ultra low gate charge
- Periodic avalanche rated
- Extreme  $dv/dt$  rated
- High peak current capability
- Improved transconductance
- PG-TO-220-3-31;-3-111: Fully isolated package (2500 VAC; 1 minute)
- Pb-free lead plating; RoHS compliant
- Qualified according to JEDEC<sup>0)</sup> for target applications

$V_{DS} @ T_{jmax}$	650	V
$R_{DS(on)}$	0.95	$\Omega$
$I_D$	4.5	A



Type	Package	Ordering Code	Marking
SPP04N60C3	PG-TO220	Q67040-S4366	04N60C3
SPA04N60C3	PG-TO220FP	SP000216299	04N60C3



### Maximum Ratings

Parameter	Symbol	Value		Unit
		SPP	SPA	
Continuous drain current $T_C = 25\text{ }^\circ\text{C}$ $T_C = 100\text{ }^\circ\text{C}$	$I_D$	4.5 2.8	4.5 <sup>1)</sup> 2.8 <sup>1)</sup>	A
Pulsed drain current, $t_p$ limited by $T_{jmax}$	$I_{D\text{ puls}}$	13.5	13.5	A
Avalanche energy, single pulse $I_D=3.4, V_{DD}=50V$	$E_{AS}$	130	130	mJ
Avalanche energy, repetitive $t_{AR}$ limited by $T_{jmax}$ <sup>2)</sup> $I_D=4.5A, V_{DD}=50V$	$E_{AR}$	0.4	0.4	
Avalanche current, repetitive $t_{AR}$ limited by $T_{jmax}$	$I_{AR}$	4.5	4.5	A
Gate source voltage static	$V_{GS}$	$\pm 20$	$\pm 20$	V
Gate source voltage AC ( $f > 1\text{Hz}$ )	$V_{GS}$	$\pm 30$	$\pm 30$	
Power dissipation, $T_C = 25\text{ }^\circ\text{C}$	$P_{tot}$	50	31	W
Operating and storage temperature	$T_j, T_{stg}$	-55...+150		$^\circ\text{C}$
Reverse diode $dv/dt$ <sup>7)</sup>	$dv/dt$	15		V/ns