FAIRCHILD SEMICONDUCTOR®

PCG3N60C3W

PRELIMINARY

January 2002

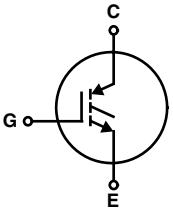
6A, 600V, UFS Series N-Channel IGBTs

Features

- **6A, 600V at $T_C = 25^oC$**
- **600V Switching SOA Capability**

Formerly developmental type TA49113.

Symbol



Electrical Specifications $T_C = 25^oC$, Unless Otherwise Specified

PARAMETER	SYMBOL	TEST CONDITIONS		MIN	TYP	MAX	UNITS
Collector to Emitter Breakdown Voltage	BV_{CES}	$I_C = 250\mu A$, $V_{GE} = 0V$		600	-	-	V
Collector to Emitter Leakage Current	I_{CES}	$V_{CE} = BV_{CES}$	$T_C = 25^oC$	-	-	250	µA
Collector to Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = I_{C110}$, $V_{GE} = 15V$	$T_C = 25^oC$	-	1.65	2.0	V
Gate to Emitter Threshold Voltage	$V_{GE(TH)}$	$I_C = 250\mu A$, $V_{CE} = V_{GE}$	$T_C = 25^oC$	3.0	5.5	6.0	V
Gate to Emitter Leakage Current	I_{GES}	$V_{GE} = \pm 25V$		-	-	±250	nA

Die Characteristics

DIE DIMENSIONS:

74 mils x 98 mils x 14 mils

WAFER DIAMETER:

5in with Standard Flat

PASSIVATION:

Nitride Thickness: 17kÅ ±1.5kÅ

FRONTSIDE METALLIZATION:

Type: Al

Metallization Mask Layout

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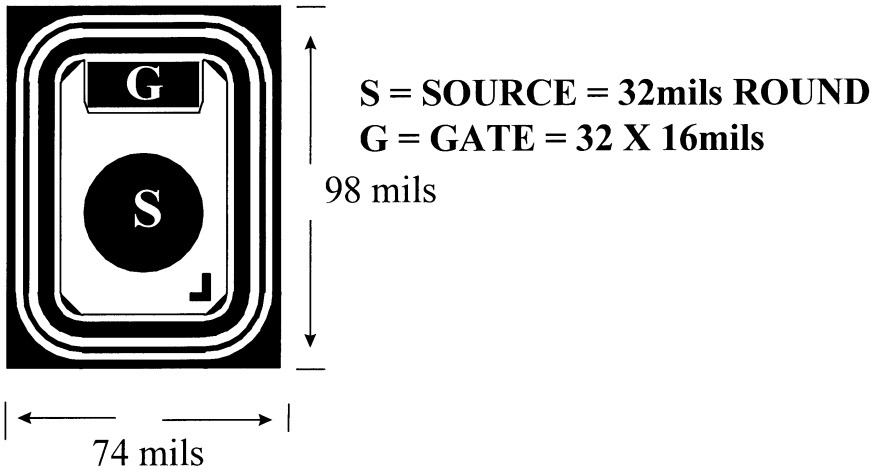

S = SOURCE = 32mils ROUND
G = GATE = 32 X 16mils

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