

MGBR15U50

Preliminary

MOS GATED BARRIER RECTIFIER

DESCRIPTION

The UTC **MGBR15U50** is a surface mount mos gated barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed etc.

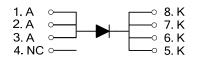
The UTC MGBR15U50 suitable for supply applications.

FEATURES

* Ultra low forward voltage drop

* High switching speed

SYMBOL

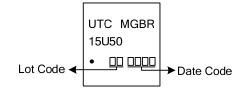


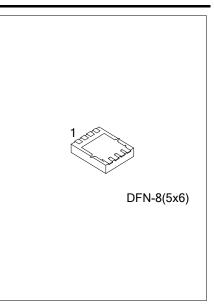
ORDERING INFORMATION

Ordering Number	Deekege	Pin Assignment								Decking	
Ordering Number	Package	1	2	3	4	5	6	7	8	Packing	
MGBR15U50G-K08-5060-R	DFN-8(5×6)	Α	А	А	NC	Κ	К	к	К	Tape Reel	
Note: Pin Assignment: A: Anode K: Con	nmon Cathode	NC: No Comment									

(2	2)Package Type	(1) R: Tape Reel (2) K08-5060: DFN-8(5×6) (3) G: Halogen Free and Lead Free
(3	3)Green Package	(3) G: Halogen Free and Lead Free

MARKING





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■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load.

ror capacitance load, derate current by 20%.			
PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V _{RM}	50	V
Working Peak Reverse Voltage	V _{RWM}	50	V
Peak Repetitive Reverse Voltage	V _{RRM}	50	V
Average Rectified Output Current	lo	15	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	200	А
Operating Junction Temperature	TJ	-65 ~ +150	°C
Storage Temperature	T _{STG}	-65 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL CHARACTERISTICS (PER LEG)

PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ _{JA}	72	°C/W

Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

ELECTRICAL CHARACTERISTICS (PER LEG) (T_A=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V _{(BR)R}	I _R =0.5mA	50			V
Forward Voltage Drop	V	I _F =15A, TJ=25°C			0.45	V
	V _{FM}	I _F =15A, T _J =125°C			0.41	V
Leakage Current	DM	V _R =50V, T _J =25°C			500	μA
		V _R =50V, T _J =125°C			25	mA

Note: Pulse Test: Pulse width \leq 300µs, Duty cycle \leq 2%.



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