MGBR30L120C DIODE

DUAL MOS GATED BARRIER RECTIFIER

■ DESCRIPTION

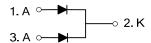
The UTC MGBR30L120C is a dual mos gated barrier rectifiers, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

■ FEATURES

- * Low forward voltage drop
- * High switching speed



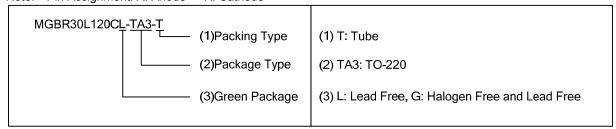
■ SYMBOL



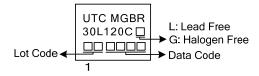
■ ORDERING INFORMATION

Ordering Number		Packago	Pin Assignment			Packing	
Lead Free	Halogen Free	Package	1	2	3	Facking	
MGBR30L120CL-TA3-T MGBR30L120CG-TA3-T		TO-220	Α	K	Α	Tube	
MGBR30L120CL-TF3-T	MGBR30L120CG-TF3-T	TO-220F	Α	K	Α	Tube	

Note: Pin Assignment: A: Anode K: Cathode



■ MARKING



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TO-220

TO-220F

MGBR30L120C

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

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

For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT	
DC Blocking Voltage	V_{RM}	120	V	
Working Peak Reverse Voltage	V_{RWM}	120	V	
Peak Repetitive Reverse Voltage	V_{RRM}	120	V	
Average Rectified Output Current Per Device	Per Leg	_	15	Α
	Total	Io	30	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	150	Α
Operating Junction Temperature		T_J	-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 DATA

PARAMETER	SYMBOL	RATINGS	UNIT	
Junction to Ambient	θ_{JA}	62.5	°C/W	
Junction to Case	θ_{JC}	3.31	°C/W	

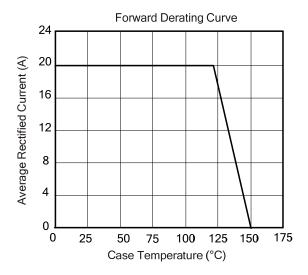
■ ELECTRICAL CHARACTERISTICS (PER LEG) (T_A =25°C unless otherwise specified.)

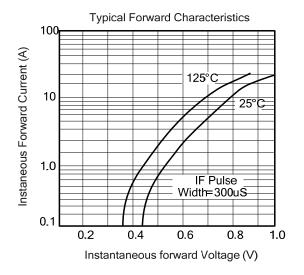
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	I _R =0.50mA	120			V
Famuerd Valtage Draw	V_{FM}	I _F =15A, T _J =25°C			0.83	V
Forward Voltage Drop		I _F =15A, T _J =125°C			0.68	V
Landana Commant (Nata 4)	ВΜ	V _R =120V, T _J =25°C			100	μA
Leakage Current (Note 1)		V _R =120V, T _J =125°C			20	mA

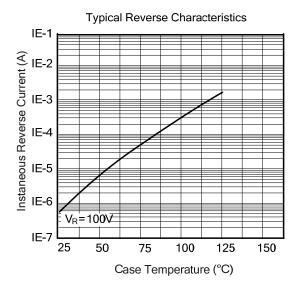
Notes: 1. Short duration pulse test used to minimize self-heating effect.

^{2.} Thermal resistance junction to case mounted on heatsink.

■ TYPICAL CHARACTERISTICS







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