



MGBR20L60C

DIODE

DUAL MOS GATED BARRIER RECTIFIERS

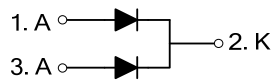
DESCRIPTION

The UTC **MGBR20L60C** is a dual mos gated barrier rectifiers, it uses UTC's advanced technology to provide customers with high current capability, low forward voltage and high switching speed, etc.

FEATURES

- * Low forward voltage
- * High switching speed
- * High current capability

SYMBOL



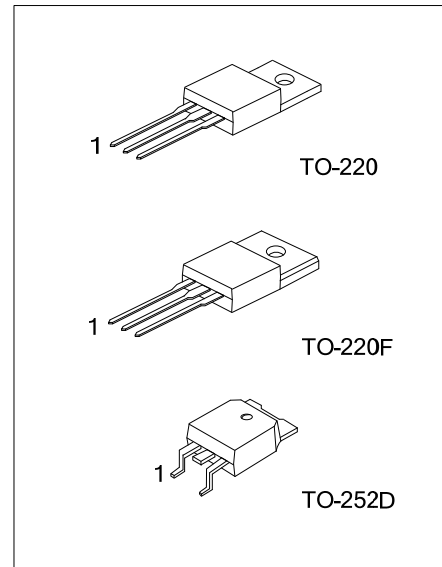
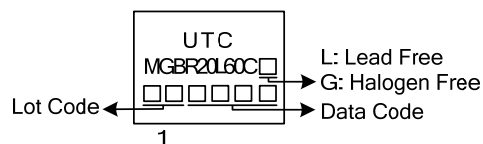
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MGBR20L60CL-TA3-T	MGBR20L60CG-TA3-T	TO-220	A	K	A	Tube
MGBR20L60CL-TF3-T	MGBR20L60CG-TF3-T	TO-220F	A	K	A	Tube
MGBR20L60CL-TND-R	MGBR20L60CG-TND-R	TO-252D	A	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Common Cathode

MGBR20L60CL-TA3-T	(1)Packing Type	(1) T: Tube, R: Tape Reel
	(2)Package Type	(2) TA3: TO-220, TF3: TO-220F, TND: TO-252D
	(3)Green Package	(3) L: Lead Free, G: Halogen Free and Lead Free

MARKING



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

PARAMETER		SYMBOL	RATINGS	UNIT
DC Blocking Voltage		V _{RM}	60	V
Working Peak Reverse Voltage		V _{RWM}	60	V
Peak Repetitive Reverse Voltage		V _{RRM}	60	V
Average Rectified Forward Current	Per Leg	I _O	10	A
	Total		20	A
Peak Forward Surge Current		I _{FSM}	150	A
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	TO-220/TO-220F	θ _{JA}	62.5	°C/W
	TO-252D		110	
Junction to Case	TO-220	θ _{JC}	2	°C/W
	TO-220F		3.31	
	TO-252D		2.5	

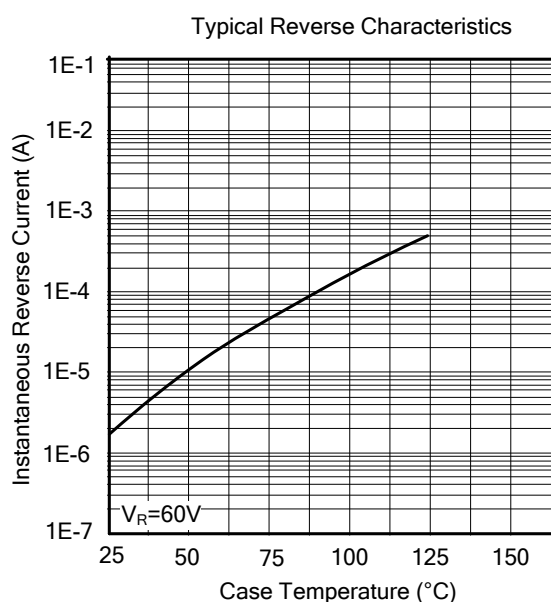
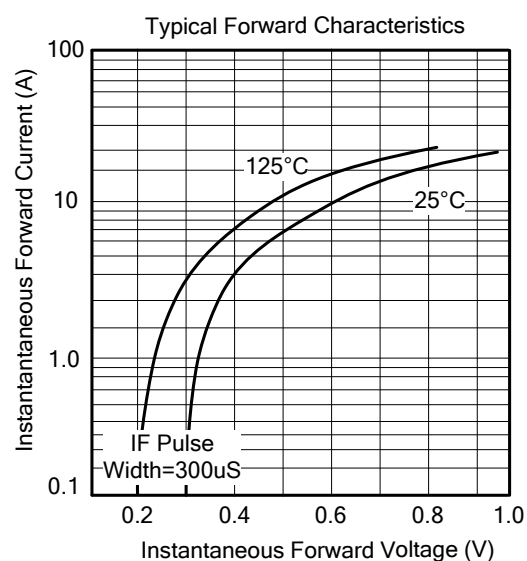
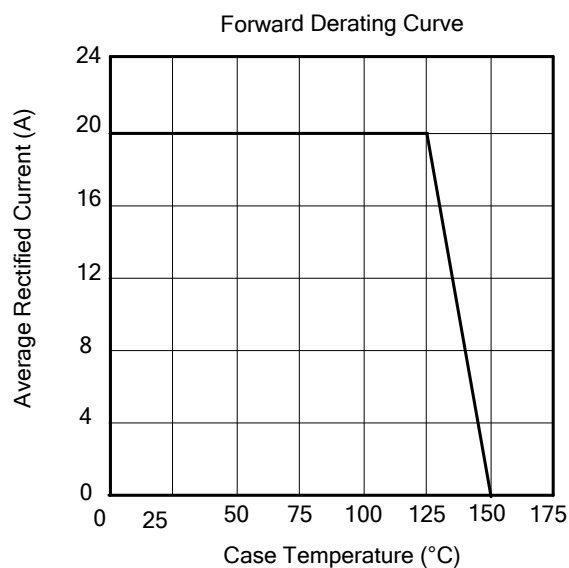
■ ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	I _R =0.50mA	60			V
Instantaneous Forward Voltage	V _{FM}	I _F =5A, T _J =25°C		0.46		V
		I _F =5A, T _J =125°C		0.41		V
		I _F =10A, T _J =25°C			0.64	V
		I _F =10A, T _J =125°C			0.59	V
Instantaneous Reverse Current (Note 1)	I _{RM}	V _{RM} =60V, T _J =25°C			300	μA
		V _{RM} =60V, 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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