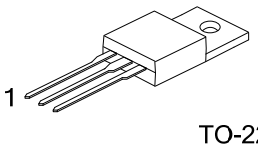
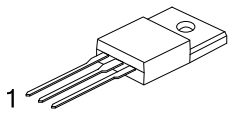
TGBR20S60C

Preliminary ***DIODE***

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER



TO-220



TO-220F

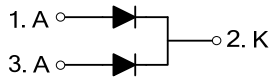
■ DESCRIPTION

The UTC **TGBR20S60C** is a dual trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with high current capability, low forward voltage and high switching speed, etc.

■ FEATURES

* Super low forward voltage
* High switching speed
* High current capability

■ SYMBOL



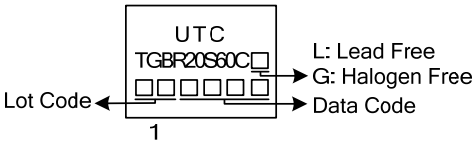
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR20S60CL-TA3-T	TGBR20S60CG-TA3-T	TO-220	A	K	A	Tube
TGBR20S60CL-TF3-T	TGBR20S60CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

TGBR40V45CL-TA3-T (1)Packing Type (2)Package Type (3)Green Package	(1) T: Tube (2) TA3: TO-220, TF3: TO-220F (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}	130	A
Operating Junction Temperature		T_J	-40~+150	°C
Storage Temperature		T_{STG}	-40~+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
Junction to Ambient		θ_{JA}	62.5	°C/W
Junction to Case	TO-220	θ_{JC}	2	°C/W
	TO-220F		3.31	

■ 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=0.60mA	60			V
Instantaneous Forward Voltage	V_{FM}	I_F=5A, T_J=25°C		0.42		V
		I_F=5A, T_J=125°C		0.38		V
		I_F=10A, T_J=25°C			0.54	V
		I_F=10A, T_J=125°C			0.49	V
Instantaneous Reverse Current (Note 1)	I_{RM}	V_{RM}=60V, T_J=25°C			500	μA
		V_{RM}=60V, T_J=125°C			50	mA

Notes: 1. Short duration pulse test used to minimize self-heating effect.
2. Thermal resistance junction to case mounted on heatsink.