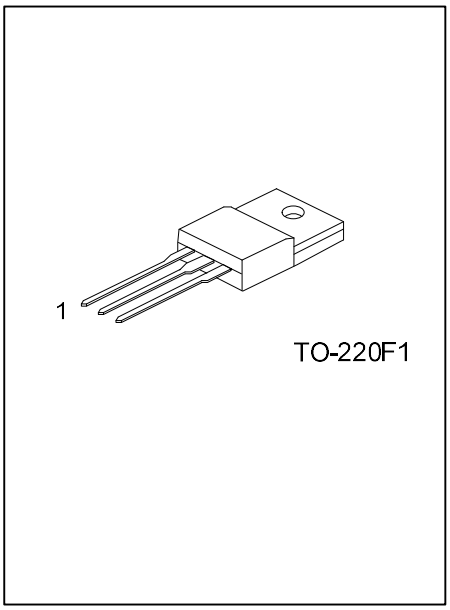
TGBR15S100

DIODE

TRENCH MOS SCHOTTKY BARRIER RECTIFIER



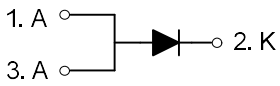
■ DESCRIPTION

The UTC **TGBR15S100** is a trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

■ FEATURES

* Super low forward voltage drop
* High switching speed

■ SYMBOL



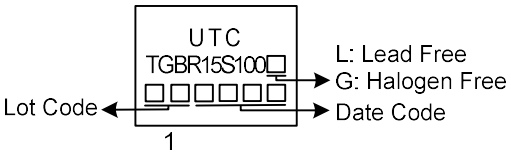
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR15S100L-TF1-T	TGBR15S100G-TF1-T	TO-220F1	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

TGBR15S100G-TF1-T (1)Packing Type (2)Package Type (3)Green Package	(1) T: Tube (2) TF1: TO-220F1 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ 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}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Average Rectified Output Current Per Device	I_O	15	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	135	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 CHARACTERISTICS (PER LEG)

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	100			V
Forward Voltage Drop	V_{FM}	I_F=15A, T_J=25°C			0.75	V
		I_F=15A, T_J=125°C			0.65	V
Leakage Current (Note 1)	I_{RM}	V_R=100V, T_J=25°C			200	μA
		V_R=100V, 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