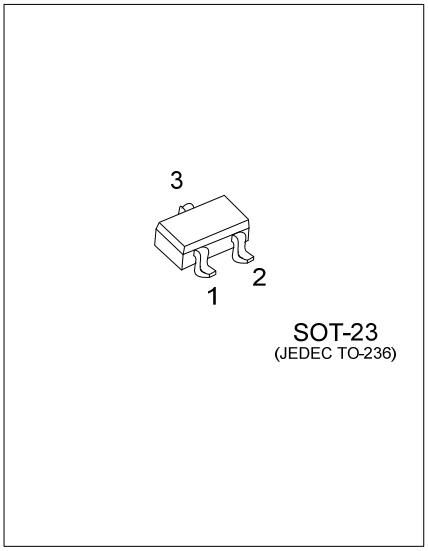
MMBD6100

Preliminary ***DIODE***

SURFACE MOUNT SWITCHING DIODE



■ DESCRIPTION

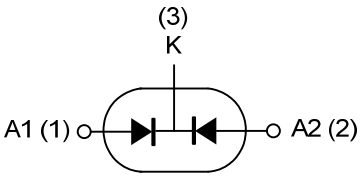
The UTC **MMBD6100** is designed for For general purpose switching application.

The devices is manufactured by the silicon epitaxial planar process and packed in plastic surface mount package.

■ FEATURES

* High conductance
* Ultra-high speed
* Low forward voltage
* Fast reverse recovery time

■ SYMBOL



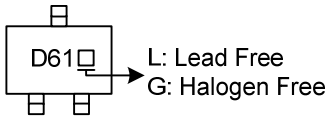
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen-Free		1	2	3	
MMBD6100L-AE3-R	MMBD6100G-AE3-R	SOT-23	A1	A2	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

MMBD6100G-AE3-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AE3: SOT-23 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Repetitive Reverse Voltage	V_{RRM}	70	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current (t=1.0μs)	I_{FSM}	2	A
Power Dissipation (Note 3)	P_D	350	mW
Junction Temperature	T_J	+150	°C
Storage Temperature	T_{STG}	-65 ~ +150	°C

Note: 1. These ratings are based on a maximum junction temperature of 200°C.
2. 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.
3. Device mounted on FR-4 PCB minimum land pad

■ THERMAL DATA

CHARACTERISTIC	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	357	°C/W

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	V_R	I_R=100μA	70			V
Forward Voltage	V_F	I_F=1mA	0.55		0.7	V
		I_F=100mA	0.85		1.1	V
Reverse Current	I_R	V_R=50V			0.1	μA
Junction Capacitance	C_J	V_R=0V, f =1.0MHz			2.5	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA, I_{RR}=0.1×I_R, R_L=100Ω			4	ns