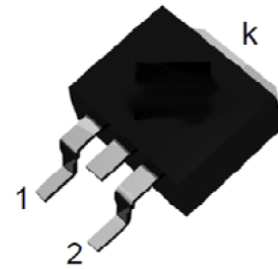


Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Guarding for over voltage protection

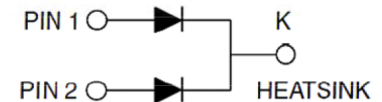


2018

Package: TO-263

Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.4grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube or tape reel packing 800/reel



Maximum Ratings & Electrical Characteristics

(T_A=25°C unless otherwise noted)

PARAMETER		TEST CONDITIONS		SYMBOL	MBRB3060CT	UNIT
Maximum repetitive peak reverse voltage				V _{RRM}	60	V
Working peak reverse voltage				V _{RWM}	60	V
Maximum DC blocking voltage				V _{DC}	60	V
Maximum average forward rectified current at T _c =105°C total device per diode				I _F (AV)	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode				I _{FSM}	200	A
Peak repetitive reverse current per leg at t _p =2.0us ,1KHz				I _{RRM}	2.0	A
Voltage rate of change (rated V _R)				Dv/dt	10000	V/us
Operating junction temperature range				T _J	—55 to+150	°C
Storage temperature range				T _{STG}	—55 to+150	°C
Maximum instantaneous forward voltage per leg		I _F =15A I _F =15A	T _C =25°C T _C =125°C	V _F	0.78 0.68	V
Maximum reverse current per leg at working peak Reverse voltage			T _J =25°C T _J =100°C	I _R	200 15	uA mA
Thermal Characteristics T _A =25°C unless otherwise noted						
Symbol	Parameter	TYP (TO-263)				Unit
RθJC	Thermal Resistance, Junction to Case per Leg	2.0				°C /W
RθJA	Thermal Resistance, Junction to Ambient per Leg	62.5				°C /W

Note: Pulse test:300us pulse width, duty cycle=2%

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

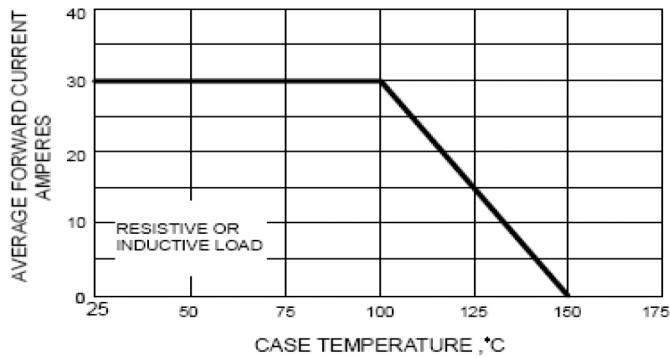


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

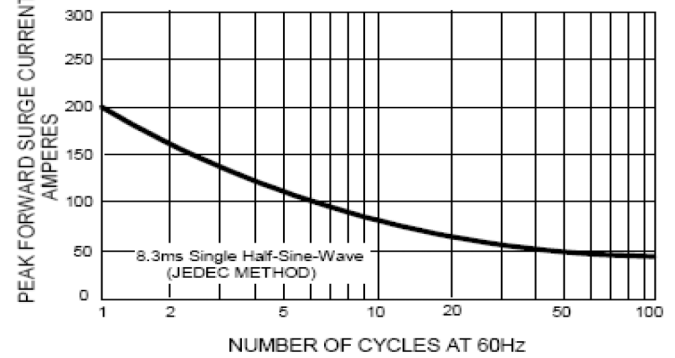


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

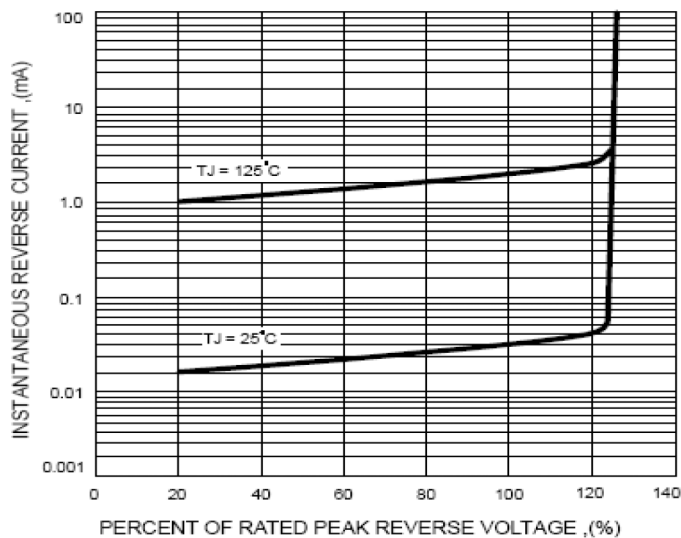


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

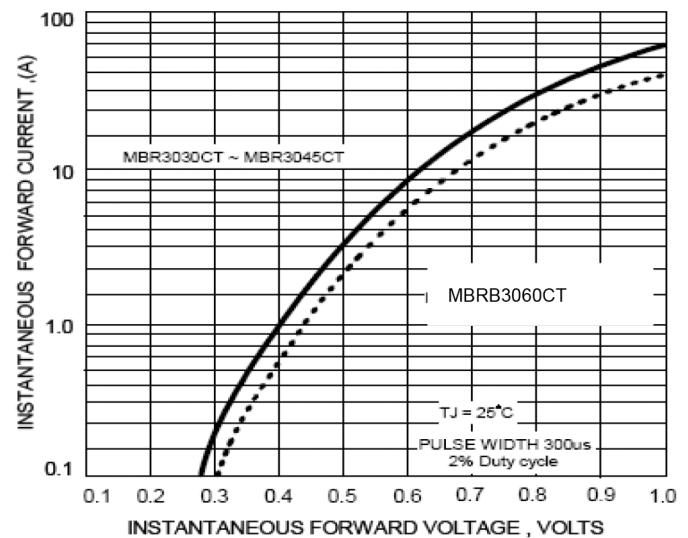
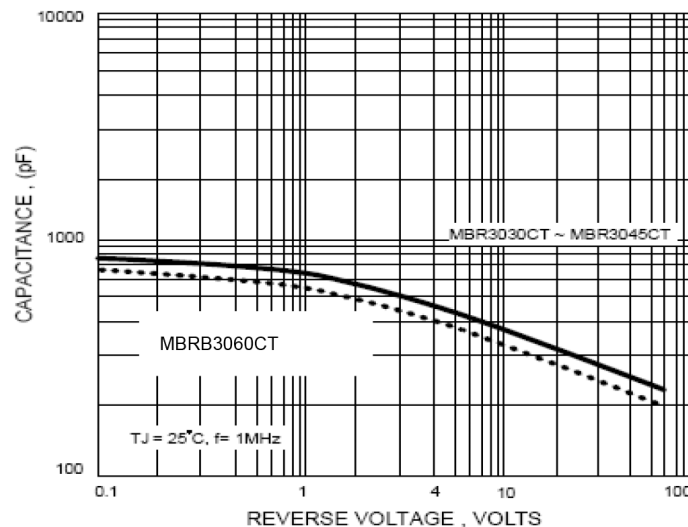


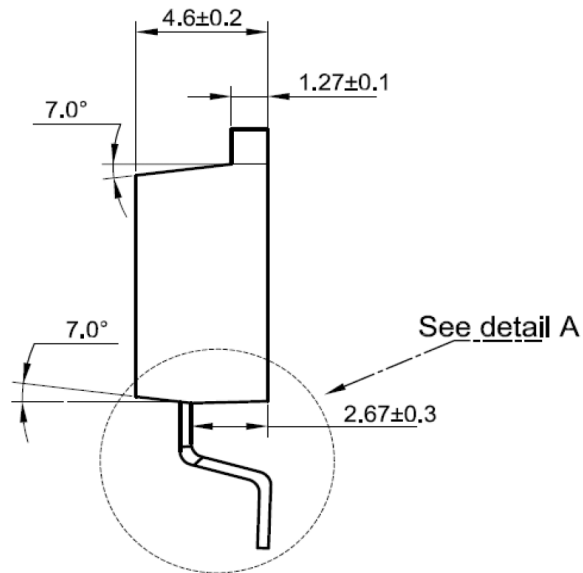
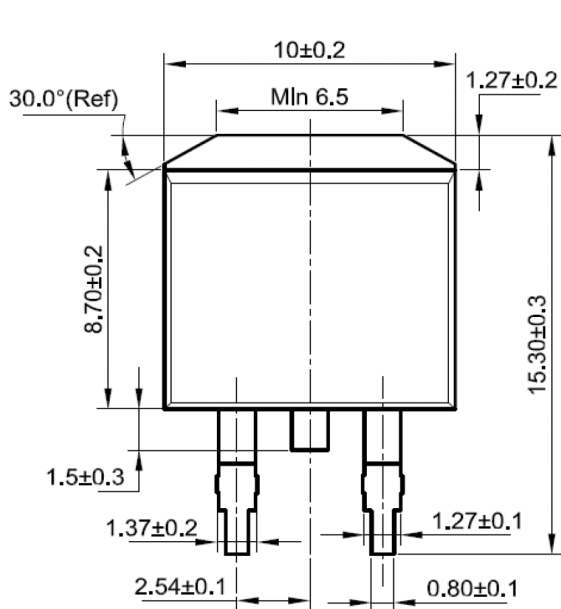
FIG.5 - TYPICAL JUNCTION CAPACITANCE



Package Outline Dimensions

Unit: millimeters

TO-263



Detail A

