

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



TO-252 (D-PAK)

Mechanical Data

- Case: Epoxy, Molded
- Weight: 0.4grams(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 2500 units per reel



Schematic Diagram

Maximum Ratings & Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	Value	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 $T_c=105^{\circ}\text{C}$ Total Device per Diode		$I_F(AV)$	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load per Diode		I_{FSM}	150	A
Voltage Rate of Change(rated V_R)		DV/dt	10000	V/us
Peak Repetitive Reverse Current per Leg at $t_p=2.0\mu\text{s}$, 1KHz		I_{RRM}	1.0	A
Operating Junction Temperature Range		T_J	-55 to+150	$^{\circ}\text{C}$
Storage Temperature Range		T_{STG}	-55 to+150	$^{\circ}\text{C}$
Maximum Instantaneous Forward Voltage per Leg	$I_F=10\text{A}$ $T_C=25^{\circ}\text{C}$ $I_F=10\text{A}$ $T_C=125^{\circ}\text{C}$	V_F	0.70 0.63	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	$T_J=25^{\circ}\text{C}$ $T_J=100^{\circ}\text{C}$	I_R	200 15	μA μA

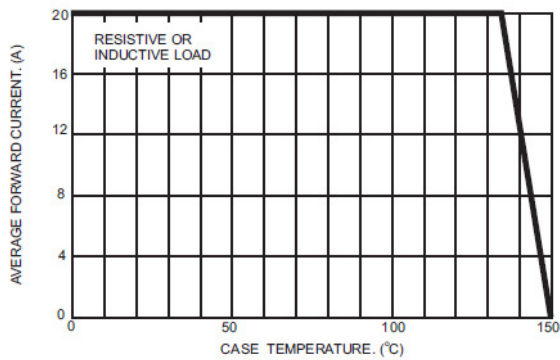
Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance, Junction to Case per Leg	$R_{\theta JC}$	4.0	$^{\circ}\text{C}/\text{W}$
Thermal Resistance, Junction to Ambient per Leg	$R_{\theta JA}$	50	$^{\circ}\text{C}/\text{W}$

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

Typical Characteristics Curves

FIG.1- FORWARD CURRENT DERATING CURVE



SURGE CURRENT PER LEG

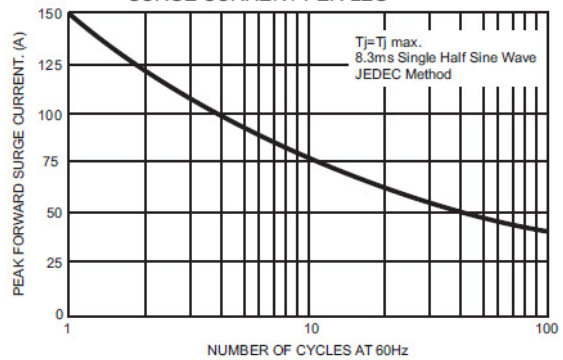


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

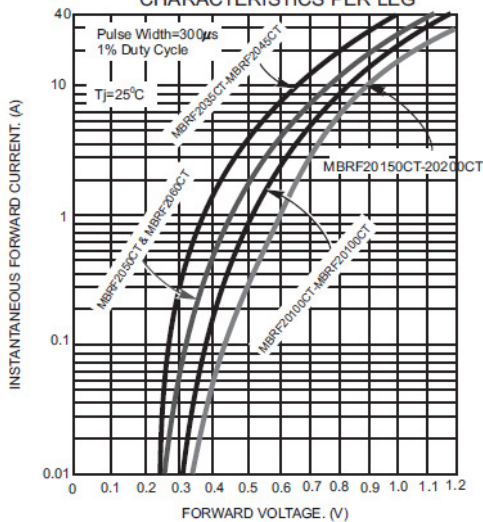


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

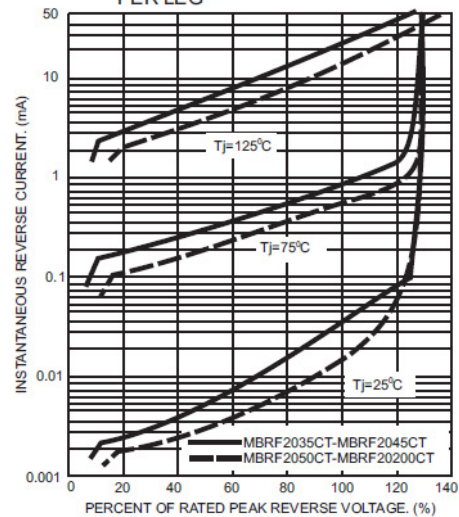


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

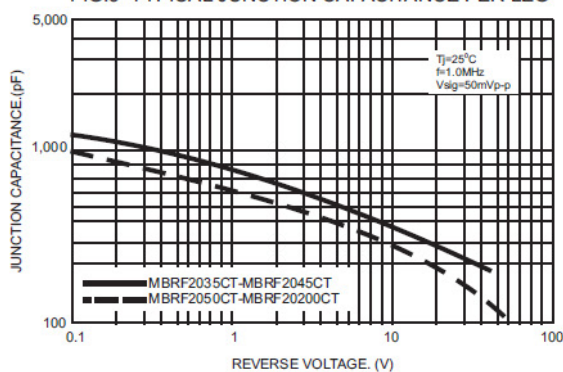
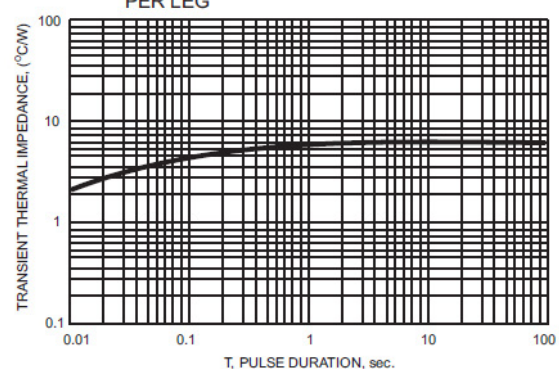


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



Package Outline Dimensions TO-252 (D-PAK)

