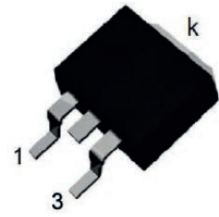
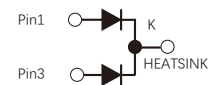


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C/10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2011/65/EU



TO-263 (D²PAK)



Schematic Diagram

Mechanical Data

- Case: JEDEC TO-263 (D²PAK) molded plastic body
- Terminals: Solderable per MIL-STD-202, method 208
- Polarity: As marked
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load.
 For capacitive load, derate by 20%)

Parameter	Symbols	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current (See Fig.1)	Per Leg	10	A
	Total Device	20	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage at 10.0A per Leg ¹	V_F	1.7	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹	$T_A=25^{\circ}C$	5	μA
	$T_A=125^{\circ}C$	250	
Maximum Reverse Recovery Time ²	t_{rr}	35	nS
Typical Thermal Resistance ³	$R_{\theta JC}$	2.5	$^{\circ}C/W$
Operating Junction Temperature Range	T_J	-55 to +150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle
2. Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$
3. Thermal resistance from junction to case

Ratings and Characteristics Curves

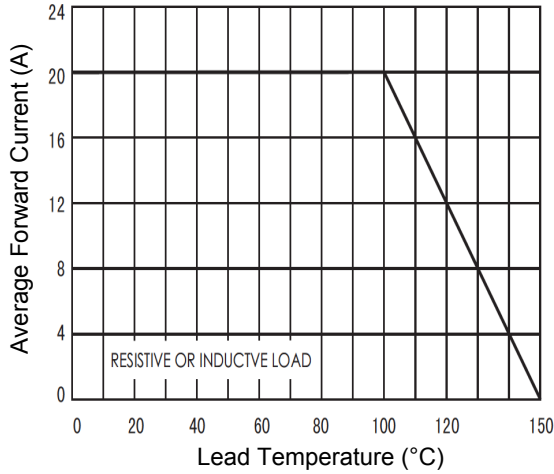


Figure 1. Forward Current Derating Curve

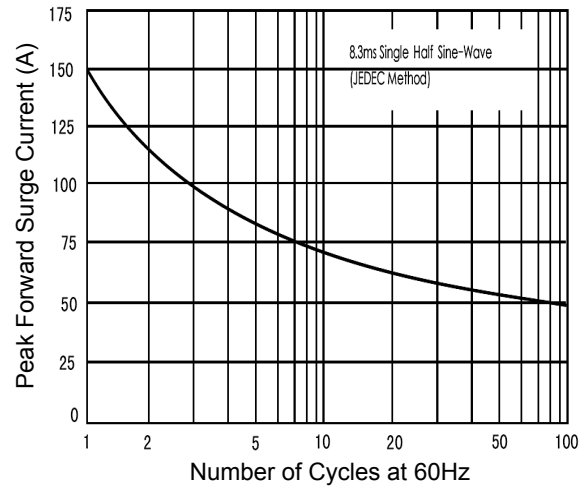


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

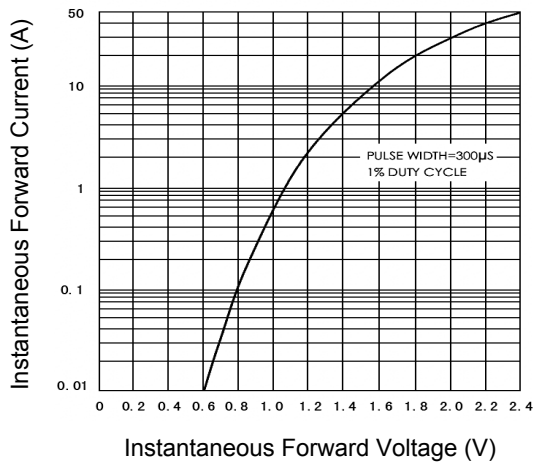


Figure 3. Typical Instantaneous Forward Characteristics

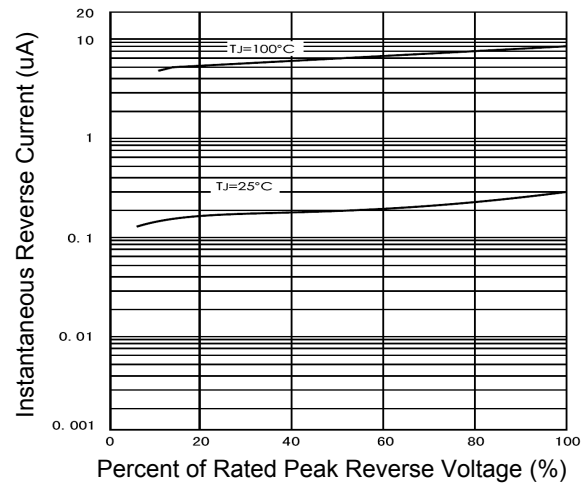


Figure 4. Typical Reverse Characteristics

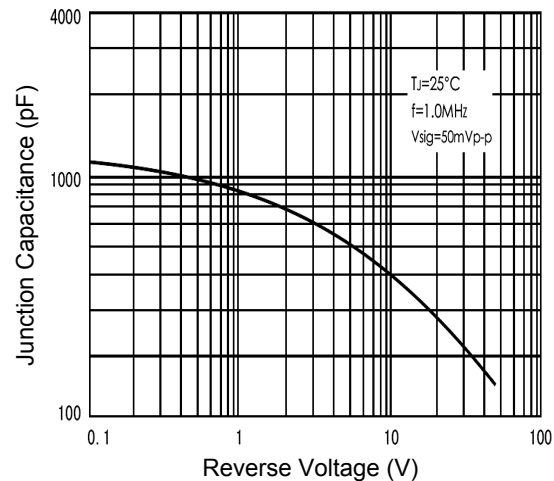


Figure 5. Typical Junction Capacitance

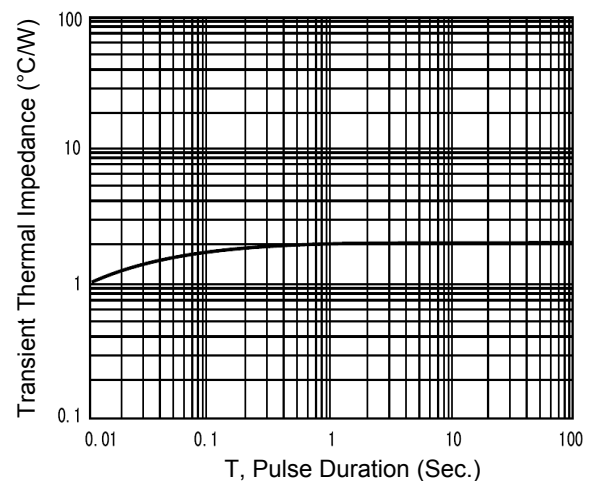
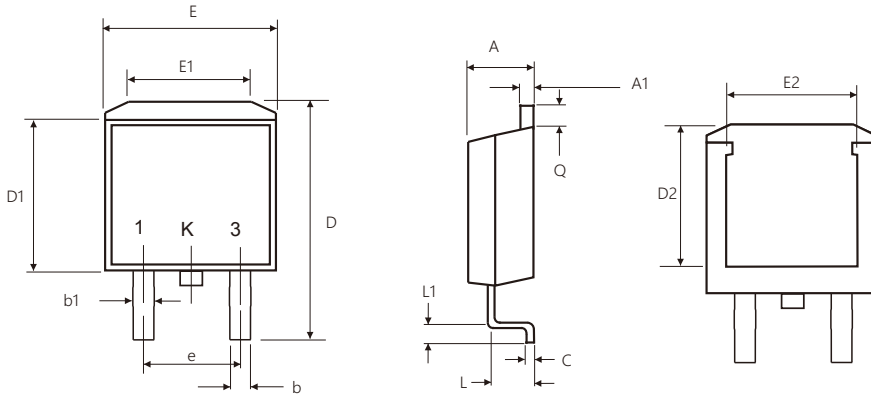


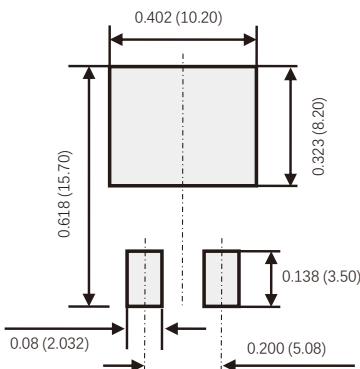
Figure 6. Typical Transient Thermal Impedance

Package Outline Dimensions TO-263 (D²PAK)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.06	4.83	0.160	0.190
A1	1.14	1.40	0.045	0.055
e	4.20	4.82	0.166	0.190
b	0.69	0.94	0.027	0.037
b1	1.20	1.34	0.047	0.053
C	0.35	0.46	0.014	0.018
D	14.22	16.22	0.560	0.639
D1	8.13	9.14	0.320	0.360
E	9.65	10.67	0.380	0.420
E1	6.22	-	0.245	-
L	2.67	3.40	0.105	0.134
L1	2.29	3.32	0.090	0.131
Q	0.92	1.68	0.036	0.066
D2	7.20	7.80	0.283	0.307
E2	7.60	8.20	0.299	0.323

Recommended Pad Layout



- Note:
1. Pad dimensions for reference
 2. Unit in inches (millimeters)

Order Information

Device	Package	Marking	Carrier	Quantity
GSMUR2060D1	TO-263 (D ² PAK)	MUR2060D1	Tape & Reel	800 Pcs / Reel