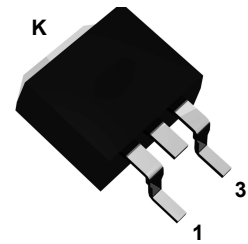
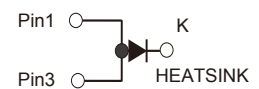


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Ultrafast recovery time
- High surge current capability
- For use in free wheeling, snubber, clamp, inversion welder, PFC, plating power supply
- High temperature soldering guaranteed: 260°C/10 seconds
- Component in accordance to RoHS 2015/863/EU



TO-263 (D²PAK)



Schematic Diagram

Mechanical Data

- Case: JEDEC TO-263 (D²PAK) molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting position: Any

Maximum Ratings (T_C=25°C unless otherwise specified)

Parameter	Symbol	Values	Unit
Maximum DC Blocking Voltage	V _R	1200	V
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1200	V
Average Forward Current (T _C =120°C)	I _{F(AV)}	15	A
RMS Forward Current (T _C =120°C)	I _{F(RMS)}	21	A
Non-Repetitive Surge Forward Current	I _{FSM}	150	A
	T _J =25°C, t=8.3ms, ½ Half Sine Wave		
Thermal Resistance Junction to Case	R _{θJC}	1.7	°C/W
Junction Temperature Range	T _J	-55 to +175	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

Electrical Characteristics (T_C=25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Maximum Reverse Leakage Current	I _{RM}	V _R =1200V	-	-	5.0	µA
		V _R =1200V, T _J =125°C	-	-	0.25	mA
Forward Voltage	V _F	I _F =15A	-	2.0	2.4	V
		I _F =15A, T _J =125°C	-	1.6	-	
Reverse Recovery Time	t _{rr}	I _F =1A, di _F /dt=-200A/µs, V _R =30V	-	32	-	nS
		I _F =0.5A, I _R =1A, I _{RR} =0.25A	-	50	60	

Ratings and Characteristics Curves

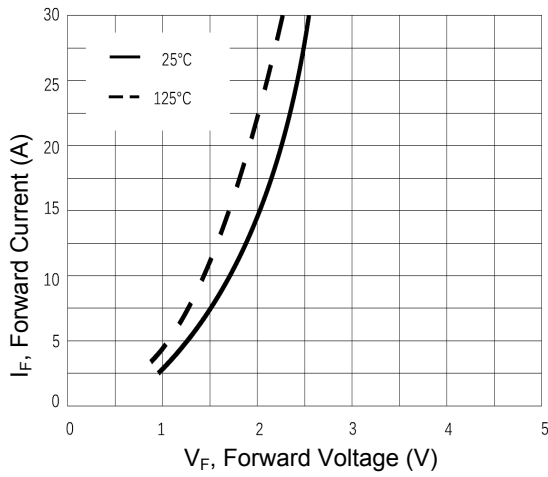


Figure 1. Forward Voltage Drop vs. Forward Current



Figure 2. Typical Reverse Characteristics

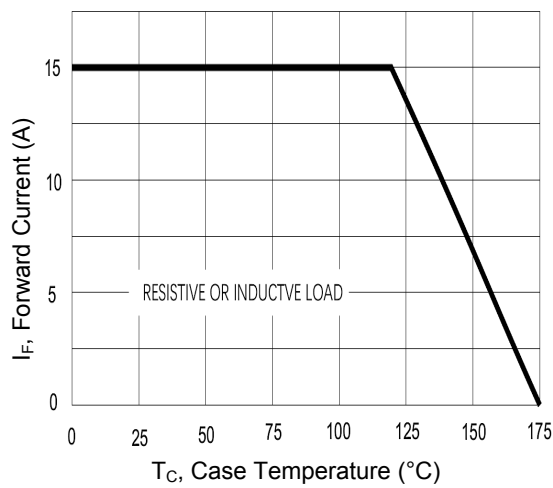


Figure 3. Forward Current vs. Case Temperature

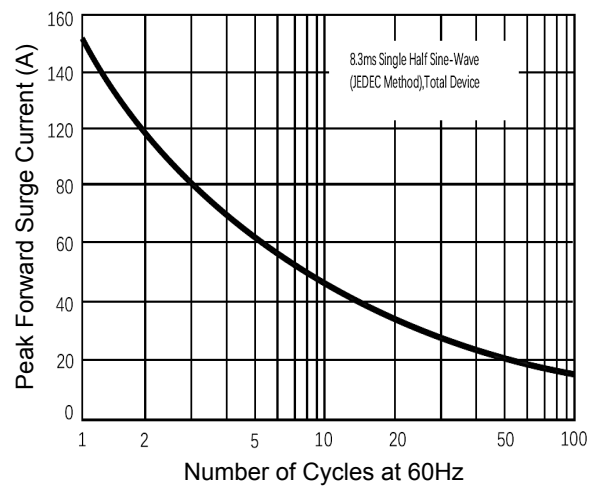
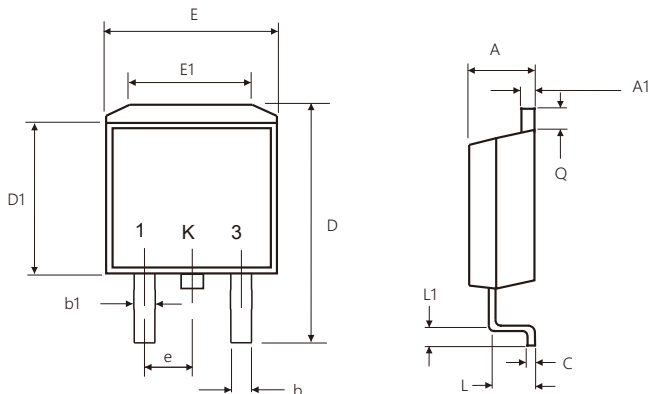


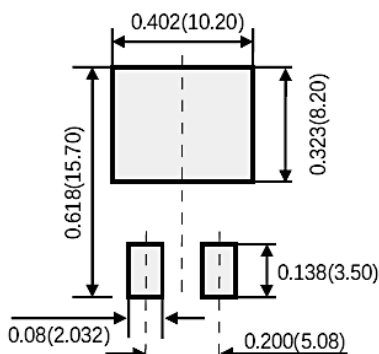
Figure 4. Maximum Non-Repetitive Peak Forward Surge Current

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	2.10	2.41	0.083	0.095
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

Recommended Pad Layout



Dimensions in inches and (millimeters)

Order Information

Device	Package	Marking	Carrier	Quantity
GSMUR15120D	TO-263 (D ² PAK)	MUR15120D3	Tape & Reel	800 Pcs / Reel