

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Surge Forward Current Capability
- Glass Passivated Chip Junction
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 3.0°C/W Junction to Case

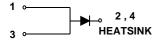
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GPB2506C	GPB2506C	600V	420V	600V

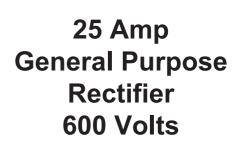
Electrical Characteristics @ 25°C Unless Otherwise Specified

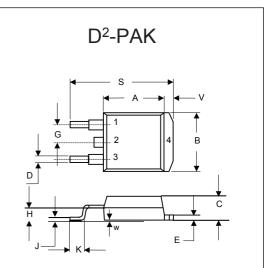
Average Forward Current	I _{F(AV)}	25A	T _c =95⁰C
Peak Forward Surge Current	I _{FSM}	300A	8.3ms,half sine
Instantaneous Forward Voltage	V _F	1.1V(Max.) 0.96V(Typ.) 0.95V(Max.)	I _F =25A; T _J =25°C I _F =25A; T _J =25°C I _F =25A; T _J =125°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5μΑ 100μΑ	T _J =25⁰C T _J =125⁰C

Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex Notes 7a.

Internal Structure







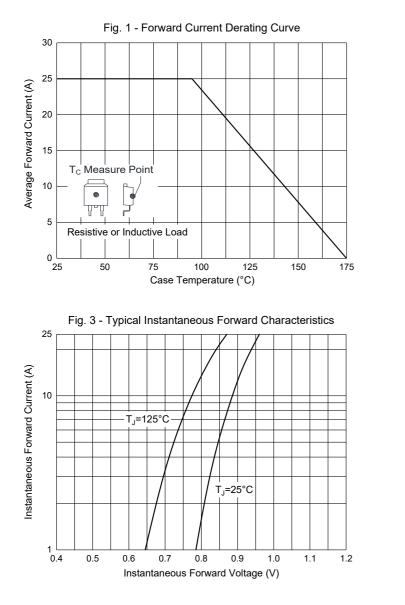
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
А	0.331	0.370	8.40	9.40	
В	0.378	0.417	9.60	10.60	
С	0.165	0.189	4.20	4.80	
D	0.027	0.037	0.68	0.94	
Е	0.045	0.055	1.14	1.40	
G	0.010		2.54		TYP.
Н	0.096	0.134	2.43	3.40	
J	0.011	0.025	0.28	0.64	
Κ	0.071	0.131	1.80	3.32	
S	0.575	0.625	14.60	15.87	
V	0.042	0.058	1.07	1.47	
W	0.000	0.010	0.00	0.25	

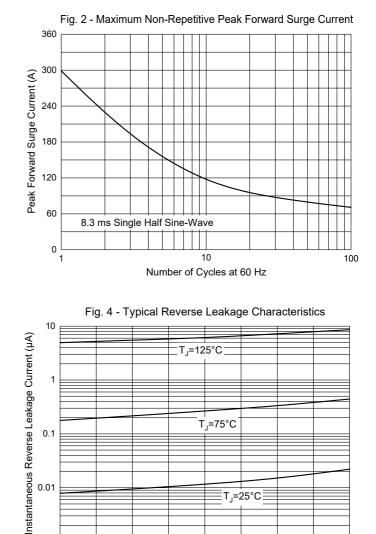
Suggested Solder Pad Layout $\begin{array}{c} & 638 \\ \hline 16.20 \\ \hline 10.66 \\ \hline 10.66 \\ \hline \hline 10.66 \\ \hline \hline 1.78 \\ \hline 1.78 \\ \hline 1.78 \\ \hline 1.78 \\ \hline \end{array}$

Rev.3-3-12152020



Curve Characteristics





± 0.001 └─ 20

40

60

Percent of Rated Peak Reverse Voltage (%)

80

100



Ordering Information

Device	Packing	
Part Number-TP	Tape&Reel: 800pcs/Reel	
Part Number-BP	Tube: 5Kpcs/Ctn	

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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